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THE PASSING OF THE GREAT RACE

THE PASSING OF THE GREAT RACE

OR

THE RACIAL BASIS OF EUROPEAN HISTORY

BY

MADISON GRANT

CHAIRMAN, NEW YORK ZOOLOGICAL SOCIETY; TRUSTEE, AMERICAN MUSEUM OF NATURAL HISTORY; COUNCILOR, AMERICAN GEOGRAPHICAL SOCIETY

FOURTH REVISED EDITION
WITH A DOCUMENTARY SUPPLEMENT

WITH PREFACES
BY
HENRY FAIRFIELD OSBORN
RESEARCH PROFESSOR OF ZOOLOGY, COLUMBIA UNIVERSITY

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To

MY FATHER

PREFACE

European history has been written in terms of nationality and of language, but never before in terms of race; yet race has played a far larger part than either language or nationality in moulding the destinies of men; race implies heredity and heredity implies all the moral, social and intellectual characteristics and traits which are the springs of politics and government.

Quite independently and unconsciously the author, never before a historian, has turned this historical sketch into the current of a great biological movement, which may be traced back to the teachings of Galton and Weismann, beginning in the last third of the nineteenth century. This movement has compelled us to recognize the superior force and stability of heredity, as being more enduring and potent than environment. This movement is also a reaction from the teachings of Hippolyte Taine among historians and of Herbert Spencer among biologists, because it proves that environment and in the case of man education have an immediate, apparent and temporary influence, while heredity has a deep, subtle and permanent influence on the actions of men.

Thus the racial history of Europe, which forms the author's main outline and subject and which is wholly original in treatment, might be paraphrased as the heredity history of Europe. It is history as influenced by the hereditary impulses, predispositions and tendencies which, as highly distinctive racial traits, date back many thousands of years and were originally formed when man was still in the tribal state, long before the advent of civilization.

In the author's opening chapters these traits and tendencies are commented upon as they are observed to-day under the varying influences of migration and changes of social and physical environment. In the chapters relating to the racial history of Europe we enter a new and fascinating field of study, which I trust the author himself may some day expand into a longer story. There is no gainsaying that this is the correct scientific method of approaching the problem of the past.

The moral tendency of the heredity interpretation of history is for our day and generation and is in strong accord with the true spirit of the modern eugenics movement in relation to patriotism, namely, the conservation and multiplication for our country of the best spiritual, moral, intellectual and physical forces of heredity; thus only will the integrity of our institutions be maintained in the future. These divine forces are more or less sporadically distributed in all races, some of them are found in what we call the lowest races, some are scattered widely throughout humanity, but they are certainly more widely and uniformly distributed in some races than in others.

Thus conservation of that race which has given us the true spirit of Americanism is not a matter either of racial pride or of racial prejudice; it is a matter of love of country, of a true sentiment which is based upon knowledge and the lessons of history rather than upon the sentimentalism which is fostered by ignorance. If I were asked: What is the greatest danger which threatens the American republic to-day? I would certainly reply: The gradual dying out among our people of those hereditary traits through which the principles of our religious, political and social foundations were laid down and their insidious replacement by traits of less noble character.

HENRY FAIRFIELD OSBORN.

July 13, 1916.

PREFACE TO SECOND EDITION

History is repeating itself in America at the present time and incidentally is giving a convincing demonstration of the central thought in this volume, namely, that heredity and racial predisposition are stronger and more stable than environment and education.

Whatever may be its intellectual, its literary, its artistic or its musical aptitudes, as compared with other races, the Anglo-Saxon branch of the Nordic race is again showing itself to be that upon which the nation must chiefly depend for leadership, for courage, for loyalty, for unity and harmony of action, for self-sacrifice and devotion to an ideal. Not that members of other races are not doing their part, many of them are, but in no other human stock which has come to this country is there displayed the unanimity of heart, mind and action which is now being displayed by the descendants of the blue-eyed, fair-haired peoples of the north of Europe. In a recent journey in northern California and Oregon I noted that, in the faces of the regiments which were first to leave for the city of New York and later that, in the wonderful array of young men at Plattsburg, the

Anglo-Saxon type was clearly dominant over every other and the purest members of this type largely outnumbered the others. In northern California I saw a great regiment detrain and with one or two exceptions they were all native Americans, descendants of the English, Scotch and north of Ireland men who founded the State of Oregon in the first half of the nineteenth century. At Plattsburg fair hair and blue eyes were very noticeable, much more so than in any ordinary crowds of American collegians as seen assembled in our universities.

It should be remembered also that many of the dark-haired, dark-eyed youths of Plattsburg and other volunteer training camps are often three-fourths or seven-eighths Nordic, because it only requires a single dark-eyed ancestor to lend the dark hair and eye color to an otherwise pure Nordic strain. There is a clear differentiation between the original Nordic, the Alpine and the Mediterranean strains; but where physical characters and characteristics are partly combined in a mosaic, and to a less degree are blended, it requires long experience to judge which strain dominates.

With a race having these predispositions, extending back to the very beginnings of European history, there is no hesitation or even waiting for conscription and the sad thought was continually in my mind in California, in Oregon and in Plattsburg that again this race was passing, that this war will take a very heavy toll of this strain of Anglo-Saxon life which has played so large a part in American history.

War is in the highest sense dysgenic rather than eugenic. It is destructive of the best strains, spiritually, morally and physically. For the world's future the destruction of wealth is a small matter compared with the destruction of the best human strains, for wealth can be renewed while these strains of the real human aristocracy once lost are lost forever. In the new world that we are working and fighting for, the world of liberty, of justice and of humanity, we shall save democracy only when democracy discovers its own aristocracy as in the days when our Republic was founded.

HENRY FAIRFIELD OSBORN.

December, 1917.

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INTRODUCTION

The following pages are devoted to an attempt to elucidate the meaning of history in terms of race; that is, by the physical and psychical characters of the inhabitants of Europe instead of by their political grouping or by their spoken language. Practically all historians, while using the word race, have relied on tribal or national names as its sole definition. The ancients, like the moderns, in determining ethnical origin did not look beyond a man's name, language or country and the actual information furnished by classic literature on the subject of physical characters is limited to a few scattered and often obscure remarks.

Modern anthropology has demonstrated that racial lines are not only absolutely independent of both national and linguistic groupings, but that in many cases these racial lines cut through them at sharp angles and correspond closely with the divisions of social cleavage. The great lesson of the science of race is the immutability of somatological or bodily characters, with which is closely associated the immutability of psychical predispositions and impulses. This continuity of inheritance has a most important bearing on the theory of democracy and still more upon that of socialism, for it naturally tends to reduce the relative importance of environment. Those engaged in social uplift and in revolutionary movements are therefore usually very intolerant of the limitations imposed by heredity. Discussion of these limitations is also most offensive to the advocates of the obliteration, under the guise of internationalism, of all existing distinctions based on nationality, language, race, religion and class. Those individuals who have neither country, nor flag, nor language, nor class, nor even surnames of their own and who can only acquire them by gift or assumption, very naturally decry and sneer at the value of these attributes of the higher types.

Democratic theories of government in their modern form are based on dogmas of equality formulated some hundred and fifty years ago and rest upon the assumption that environment and not heredity is the controlling factor in human development. Philanthropy and noble purpose dictated the doctrine expressed in the Declaration of Independence, the document which to-day constitutes the actual basis of American institutions. The men who wrote the words, "we hold these truths to be self-evident, that all men are created equal," were themselves the owners of slaves and despised Indians as something less than human. Equality in their minds meant merely that they were just as good Englishmen as their brothers across the sea. The words "that all men are created equal" have since been subtly falsified by adding the word "free," although no such expression is found in the original document and the teachings based on these altered words in the American public schools of to-day would startle and amaze the men who formulated the Declaration.

It will be necessary for the reader to divest his mind of all preconceptions as to race, since modern anthropology, when applied to history, involves an entire change of definition. We must, first of all, realize that race pure and simple, the physical and psychical structure of man, is something entirely distinct from either nationality or language. Furthermore, race lies at the base of all the manifestation of modern society, just as it has done throughout the unrecorded eons of the past and the laws of nature operate with the same relentless and unchanging force in human affairs as in the phenomena of inanimate nature.

The antiquity of existing European populations, viewed in the light thrown upon their origins by the discoveries of the last few decades, enables us to carry back history and prehistory into periods so remote that the classic world is but of yesterday. The living peoples of Europe consist of layer upon layer of diverse racial elements in varying proportions and historians and anthropologists, while studying these populations, have been concerned chiefly with the recent strata and have neglected the more ancient and submerged types.

Aboriginal populations from time immemorial have been again and again swamped under floods of newcomers and have disappeared for a time from historic view. In the course of centuries, however, these primitive elements have slowly reasserted their physical type and have gradually bred out their conquerors, so that the racial history of Europe has been in the past, and is to-day, a story of the repression and resurgence of ancient races.

Invasions of new races have ordinarily arrived in successive waves, the earlier ones being quickly absorbed by the conquered, while the later arrivals usually maintain longer the purity of their type. Consequently the more recent elements are found in a less mixed state than the older and the more primitive strata of the population always contain physical traits derived from still more ancient predecessors.

Man has inhabited Europe in some form or other for hundreds of thousands of years and during all this lapse of time the population has been as dense as the food supply permitted. Tribes in the hunting stage are necessarily of small size, no matter how abundant the game and in the Paleolithic period man probably existed only in specially favorable localities and in relatively small communities.

In the Neolithic and Bronze periods domesticated animals and the knowledge of agriculture, although of primitive character, afforded an enlarged food supply and the population in consequence greatly increased. The lake dwellers of the Neolithic were, for example, relatively numerous. With the clearing of the forests and the draining of the swamps during the Middle Ages and, above all, with the industrial expansion of the last century the population multiplied with great rapidity. We can, of course, form little or no estimate of the numbers of the Paleolithic population of Europe and not much more of those of Neolithic times, but even the latter must have been very small in comparison with the census of to-day.

Some conception of the growth of population in recent times may be based on the increase in England. It has been computed that Saxon England at the time of the Conquest contained about 1,500,000 inhabitants, at the time of Queen Elizabeth the population was about 4,000,000, while in 1911 the census gave for the same area some 35,000,000.

The immense range of the subject of race in connection with history from its nebulous dawn and the limitations of space, require that generalizations must often be stated without mention of exceptions. These sweeping statements may even appear to be too bold, but they rest, to the best of the writer's belief, upon solid foundations of facts or else are legitimate conclusions from evidence now in hand. In a science as recent as modern anthropology, new facts are constantly revealed and require the modification of existing hypotheses. The more the subject is studied, the more provisional even the best-sustained theory appears, but modern research opens a vista of vast interest and significance to man, now that we have discarded the shackles of former false viewpoints and are able to discern, even though dimly, the solution of many of the problems of race. In the future new data will inevitably expand and perhaps change our ideas, but such facts as are now in hand and the conclusions based thereupon are provisionally set forth in the following chapters and necessarily often in a dogmatic form.

The statements relating to time have presented the greatest difficulty, as the authorities differ widely, but the dates have been fixed with extreme conservatism and the writer believes that whatever changes in them are hereafter required by further investigation and study, will result in pushing them back and not forward in prehistory. The dates given in the chapter on "Paleolithic Man" are frankly taken from the most recent authority on this subject, "The Men of the Old Stone Age," by Prof. Henry Fairfield Osborn and the writer desires to take this opportunity to acknowledge his great indebtedness to this source of information, as well as to Mr. M. Taylor Pyne and to Mr. Charles Stewart Davison for their assistance and many helpful suggestions.

The author also wishes to acknowledge his obligation to Prof. William Z. Ripley's "The Races of Europe," which contains a large array of anthropological measurements, maps and type portraits, providing valuable data for the present distribution of the three primary races of Europe.

The American Geographical Society and its staff, particularly Mr. Leon Dominian, have also been of great help in the preparation of the maps herein contained and this occasion is taken by the writer to express his appreciation for their assistance.

INTRODUCTION TO THE FOURTH REVISED EDITION

The addition of a Documentary Supplement to the latest revision of this book has been made in response to a persistent demand for "authorities."

The author has endeavored to make the references and quotations in this Supplement very full and, so far as possible, interesting in themselves as well as entirely distinct from the text, which stands substantially unchanged, and the authorities quoted are not necessarily the sources of the views herein expressed but more often are given in support of them. The contents of the book, since its first appearance, have had the advantage of the criticism of virtually every anthropologist in America and in England, France and Italy—many of whom have furnished the author with valuable corroborative material. Some of this material appears in the notes, but accessible authorities and the classical writers have been given the more prominent place. The supplement covered, as first prepared, substantially every statement in the book, but much was afterward omitted because it would seem that some things could be taken without proof.

"The Passing of the Great Race," in its original form, was designed by the author to rouse his fellow-Americans to the overwhelming importance of race and to the folly of the "Melting Pot" theory, even at the expense of bitter controversy. This purpose has been accomplished thoroughly, and one of the most far-reaching effects of the doctrines enunciated in this volume and in the discussions that followed its publication was the decision of the Congress of the United States to adopt discriminatory and restrictive measures against the immigration of undesirable races and peoples.

Another of the results has been the publication in America and Europe of a series of books and articles more or less anthropological in character which have sustained or controverted its main theme. The new definition of race and the controlling rôle played by race in all the manifestations of what we call civilization are now generally accepted even by those whose political position depends upon popular favor.

It was to be expected that there would be bitter opposition to those definitions of race which are based on physical and psychical characters that are immutable, rather than upon those derived from language or political allegiance, that are easily altered.

To admit the unchangeable differentiation of race in its modern scientific meaning is to admit inevitably the existence of superiority in one race and of inferiority in another. Such an admission we can hardly expect from those of inferior races. These inferior races and classes are prompt to recognize in such an admission the very real danger to themselves of being relegated again to their former obscurity and subordinate position in society. The favorite defense of these inferior classes is an unqualified denial of the existence of fixed inherited qualities, either physical or spiritual, which cannot be obliterated or greatly modified by a change of environment. Failing in this, as they must necessarily fail, they point out the presence of mixed or intermediate types, and claim that in these mixtures, or blends as they choose to call them, the higher type tends to predominate. In fact, of course, the exact opposite is the case and it is scarcely necessary to cite the universal distrust, often contempt, that the half-breed between two sharply contrasted races inspires the world over. Belonging physically and spiritually to the lower race, but aspiring to recognition as one of the higher race, the unfortunate mongrel, in addition to a disharmonic physique, often inherits from one parent an unstable brain which is stimulated and at times overexcited by flashes of brilliancy from the other. The result is a total lack of continuity of purpose, an intermittent intellect goaded into spasmodic outbursts of energy. Where the parent races are not so widelyse parated, as in case of crosses between negroes, Indians and whites, we may have a generation which gives us individuals occupying the border land between genius and insanity.

The essential character of all these racial mixtures is a lack of harmony—both physical and mental—in the first few generations. Then, if the strain survives, it is by the slow reversion to one of the parent types—almost inevitably the lower.

The temporary advantage of mere numbers enjoyed by the inferior classes in modern democracies can only be made permanent by the destruction of superior types—by massacre, as in Russia, or by taxation, as in England. In the latter country the financial burdens of the war and the selfish interests of labor have imposed such a load of taxation upon the upper and middle classes that marriage and children are becoming increasingly burdensome.

The best example of complete elimination of a dominant class is in Santo Domingo. The horrors of the black revolt were followed by the slow death of the culture of the white man. This history should be studied carefully because it gives in prophetic form the sequence of events that we may expect to find in Mexico and in parts of South America where the replacement of the higher type by the resurgent native is taking place.

In the countries inhabited by a population more or less racially uniform the phenomenon of the multiplication of the inferior classes fostered and aided by the noble but fatuous philanthropy of the well-to-do everywhere appears. Nature's laws when unchecked maintain a relatively fixed ratio between the classes, which is greatly impaired in modern society by humanitarian and charitable activities. The resurgence of inferior races and classes throughout not merely Europe but the world, is evident in every despatch from Egypt, Ireland, Poland, Rumania, India and Mexico. It is called nationalism, patriotism, freedom and other high-sounding names, but it is everywhere the phenomenon of the long-suppressed, conquered servile classes rising against the master race. The late Peloponnesian War in the world at large, like the Civil War in America, has shattered the prestige of the white race and it will take several generations and perhaps wars to recover its former control, if it ever does regain it. The danger is from within and not from without. Neither the black, nor the brown, nor the yellow, nor the red will conquer the white in battle. But if the valuable elements in the Nordic race mix with inferior strains or die out through race suicide, then the citadel of civilization will fall for mere lack of defenders.

One of the curious effects of democracy is the unquestionable fact that there is less freedom of the press than under autocratic forms of government. It is well-nigh impossible to publish in the American newspapers any reflection upon certain religions or races which are hysterically sensitive even when mentioned by name. The underlying idea seems to be that if publication can be suppressed the facts themselves will ultimately disappear. Abroad, conditions are fully as bad, and we have the authority of one of the most eminent anthropologists in France that the collection of anthropological measurements and data among French recruits at the outbreak of the Great War was prevented by Jewish influence, which aimed to suppress any suggestion of racial differentiation in France. In the United States also, during the war, we were unable to obtain complete measurements and data, in spite of the self-devotion of certain scientists, like Drs. Davenport, Sullivan and others. This failure was due to lack of time and equipment and not to racial influences, but in the near future we may confidently expect in this country strenuous opposition to any public discussion of race as such.

The rapidly growing appreciation of the importance of race during the last few years, the study of the influence of race on nationality as shown by the after-war disputes over boundaries, the increasing complexity of our own problems between the whites and blacks, between the Americans and Japs, and between the native Americans and the hyphenated aliens in our midst upon whom we have carelessly urged citizenship, and, above all, the recognition that the leaders of labor and their more zealous followers are almost all foreigners, have served to arouse Americans to a realization of the menace of the impending Migration of Peoples through unrestrained freedom of entry here. The days of the Civil War and the provincial sentimentalism which governed or misgoverned our public opinion are past, and this generation must completely repudiate the proud boast of our fathers that they acknowledged no distinction in "race, creed, or color," or else the native American must turn the page of history and write:

"FINIS AMERICÆ"

THE PASSING OF THE GREAT RACE

PART I

RACE, LANGUAGE AND NATIONALITY

I

RACE AND DEMOCRACY

Failure to recognize the clear distinction between race and nationality and the still greater distinction between race and language and the easy assumption that the one is indicative of the other have been in the past serious impediments to an understanding of racial values. Historians and philologists have approached the subject from the viewpoint of linguistics and as a result we are to-day burdened with a group of mythical races, such as the Latin, the Aryan, the Indo-Germanic, the Caucasian and, perhaps, most inconsistent of all, the Celtic race.

Man is an animal differing from his fellow inhabitants of the globe not in kind but only in degree of development and an intelligent study of the human species must be preceded by an extended knowledge of other mammals, especially the primates. Instead of such essential training, anthropologists often seek to qualify by research in linguistics, religion or marriage customs or in designs of pottery or blanket weaving, all of which relate to ethnology alone. As a result the influence of environment is often overestimated and overstated at the expense of heredity.

The question of race has been further complicated by the effort of old-fashioned theologians to cramp all mankind into the scant six thousand years of Hebrew chronology as expounded by Archbishop Ussher. Religious teachers have also maintained the proposition not only that man is something fundamentally distinct from other living creatures, but that there are no inherited differences in humanity that cannot be obliterated by education and environment.

It is, therefore, necessary at the outset for the reader to appreciate thoroughly that race, language and nationality are three separate and distinct things and that in Europe these three elements are found only occasionally persisting in combination, as in the Scandinavian nations.

To realize the transitory nature of political boundaries one has but to consider the changes which have occurred during the past century and as to language, here in America we hear daily the English language spoken by many men who possess not one drop of English blood and who, a few years since, knew not one word of Saxon speech.

As a result of certain religious and social doctrines, now happily becoming obsolete, race consciousness has been greatly impaired among civilized nations but in the beginning all differences of class, of caste and of color marked actual lines of race cleavage.

In many countries the existing classes represent races that were once distinct. In the city of New York and elsewhere in the United States there is a native American aristocracy resting upon layer after layer of immigrants of lower races and these native Americans, while, of course, disclaiming the distinction of a patrician class and lacking in class consciousness and class dignity, have, nevertheless, up to this time supplied the leaders in thought and in the control of capital as well as of education and of the religious ideals and altruistic bias of the community.

In the democratic forms of government the operation of universal suffrage tends toward the selection of the average man for public office rather than the man qualified by birth, education and integrity. How this scheme of administration will ultimately work out remains to be seen but from a racial point of view it will inevitably increase the preponderance of the lower types and cause a corresponding loss of efficiency in the community as a whole.

The tendency in a democracy is toward a standardization of type and a diminution of the influence of genius. A majority must of necessity be inferior to a picked minority and it always resents specializations in which it cannot share.

In the French Revolution the majority, calling itself "the people," deliberately endeavored to destroy the higher type and something of the same sort was in a measure done after the American Revolution by the expulsion of the Loyalists and the confiscation of their lands, with a resultant loss to the growing nation of good race strains, which were in the next century replaced by immigrants of far lower type.

In America we have nearly succeeded in destroying the privilege of birth; that is, the intellectual and moral advantage a man of good stock brings into the world with him. We are now engaged in destroying the privilege of wealth; that is, the reward of successful intelligence and industry and in some quarters there is developing a tendency to attack the privilege of intellect and to deprive a man of the advantage gained from an early and thorough classical education. Simplified spelling is a step in this direction. Ignorance of English grammar or classic learning must not, forsooth, be held up as a reproach to the political or social aspirant.

Mankind emerged from savagery and barbarism under the leadership of selected individuals whose personal prowess, capacity or wisdom gave them the right to lead and the power to compel obedience. Such leaders have always been a minute fraction of the whole, but as long as the tradition of their predominance persisted they were able to use the brute strength of the unthinking herd as part of their own force and were able to direct at will the blind dynamic impulse of the slaves, peasants or lower classes. Such a despot had an enormous power at his disposal which, if he were benevolent or even intelligent, could be used and most frequently was used for the general uplift of the race. Even those rulers who most abused this power put down with merciless rigor the antisocial elements, such as pirates, brigands or anarchists, which impair the progress of a community, as disease or wounds cripple an individual.

True aristocracy or a true republic is government by the wisest and best, always a small minority in any population. Human society is like a serpent dragging its long body on the ground, but with the head always thrust a little in advance and a little elevated above the earth. The serpent's tail, in human society represented by the antisocial forces, was in the past dragged by sheer strength along the path of progress. Such has been the organization of mankind from the beginning, and such it still is in older communities than ours. What progress humanity can make under the control of universal suffrage, or the rule of the average, may find a further analogy in the habits of certain snakes which wiggle sideways and disregard the head with its brains and eyes. Such serpents, however, are not noted for their ability to make rapid progress.

A true republic, the function of which is administration in the interests of the whole community—in contrast to a pure democracy, which in last analysis is the rule of the demos or a majority in its own interests—should be, and often is, the medium of selection for the technical task of government of those best qualified by antecedents, character and education, in short, of experts.

To use another simile, in an aristocratic as distinguished from a plutocratic or democratic organization the intellectual and talented classes form the point of the lance while the massive shaft represents the body of the population and adds by its bulk and weight to the penetrative impact of the tip. In a democratic system this concentrated force is dispersed throughout the mass. It supplies, to be sure, a certain amount of leaven but in the long run the force and genius of the small minority is dissipated, and its efficiency lost. *Vox populi*, so far from being *Vox Dei*, thus becomes an unending wail for rights and never a chant of duty.

Where a conquering race is imposed on another race the institution of slavery often arises to compel the servient race to work and to introduce it forcibly to a higher form of civilization. As soon as men can be induced to labor to supply their own needs slavery becomes wasteful and tends to vanish. From a material point of view slaves are often more fortunate than freemen when treated with reasonable humanity and when their elemental wants of food, clothing and shelter are supplied.

The Indians around the fur posts in northern Canada were formerly the virtual bond slaves of the Hudson Bay Company, each Indian and his squaw and pappoose being adequately supplied with simple food and equipment. He was protected as well against the white man's rum as the red man's scalping parties and in return gave the Company all his peltries—the whole product of his year's work. From an Indian's point of view this was nearly an ideal condition but was to all intents serfdom or slavery. When through the opening up of the country the continuance of such an archaic system became an impossibility, the Indian sold his furs to the highest bidder, received a large price in cash and then wasted the proceeds in trinkets instead of blankets and in rum instead of flour, with the result that he is now gloriously free but is on the highroad to becoming a diseased outcast. In this case of the Hudson Bay Indian the advantages of the upward step from serfdom to freedom are not altogether clear. A very similar condition of vassalage existed until recently among the peons of Mexico, but without the compensation of the control of an intelligent and provident ruling class.

In the same way serfdom in mediæval Europe apparently was a device through which the landowners repressed the nomadic instinct in their tenantry which became marked when the fertility of the land declined after the dissolution of the Roman Empire. Years are required to bring land to its highest productivity and agriculture cannot be successfully practised even in well-watered and fertile districts by farmers who continually drift from one locality to another. The serf or villein was, therefore, tied by law to the land and could not leave except with his master's consent. As soon as the nomadic instinct was eliminated serfdom vanished. One has but to read the severe laws against vagrancy in England just before the Reformation to realize how widespread and serious was this nomadic instinct. Here in America we have not yet forgotten the wandering instincts of our Western pioneers, which in that case proved beneficial to every one except the migrants.

While democracy is fatal to progress when two races of unequal value live side by side, an aristocracy may be equally injurious whenever, in order to purchase a few generations of ease and luxury, slaves or immigrants are imported to do the heavy work. It was a form of aristocracy that brought slaves to the American colonies and the West Indies and if there had been an aristocratic form of governmental control in California, Chinese coolies and Japanese laborers would now form the controlling element, so far as numbers are concerned, on the Pacific coast.

It was the upper classes who encouraged the introduction of immigrant labor to work American factories and mines and it is the native American gentleman who builds a palace on the country side and who introduces as servants all manner of foreigners into purely American districts. The farming and artisan classes of America did not take alarm until it was too late and they are now seriously threatened with extermination in many parts of the country. In Rome, also, it was the plebeian, who first went under in the competition with slaves but the patrician followed in his turn a few generations later.

The West Indian sugar planters flourished in the eighteenth century and produced some strong men; to-day from the same causes they have vanished from the scene.

During the last century the New England manufacturer imported the Irish and French Canadians and the resultant fall in the New England birthrate at once became ominous. The refusal of the native American to work with his hands when he can hire or import serfs to do manual labor for him is the prelude to his extinction and the immigrant laborers are now breeding out their masters and killing by filth and by crowding as effectively as by the sword.

Thus the American sold his birthright in a continent to solve a labor problem. Instead of retaining political control and making citizenship an honorable and valued privilege, he intrusted the government of his country and the maintenance of his ideals to races who have never yet succeeded in governing themselves, much less any one else.

Associated with this advance of democracy and the transfer of power from the higher to the lower races, from the intellectual to the plebeian class, we find the spread of socialism and the recrudescence of obsolete religious forms. Although these phenomena appear to be contradictory, they are in reality closely related since both represent reactions from the intense individualism which a century ago was eminently characteristic of Americans.

II

THE PHYSICAL BASIS OF RACE

In the modern and scientific study of race we have long since discarded the Adamic theory that man is descended from a single pair, created a few thousand years ago in a mythical Garden of Eden somewhere in Asia, to spread later over the earth in successive waves.

It is a fact, however, that Asia was the chief area of evolution and differentiation of man and that the various groups had their main development there and not on the peninsula we call Europe.

Many of the races of Europe, both living and extinct, did come from the East through Asia Minor or by way of the African littoral, but most of the direct ancestors of existing populations have inhabited Europe for many thousands of years. During that time numerous races of men have passed over the scene. Some undoubtedly have utterly vanished and some have left their blood behind them in the Europeans of to-day.

We now know, since the elaboration of the Mendelian Laws of Inheritance, that certain bodily characters, such as skull shape, stature, eye color, hair color and nose form, some of which are so-called unit characters, are transmitted in accordance with fixed laws, and, further, that various characters which are normally correlated or linked together in pure races may, after a prolonged admixture of races, pass down separately and form what is known as disharmonic combinations. Such disharmonic combinations are, for example, a tall brunet or a short blond; blue eyes associated with brunet hair or brown eyes with blond hair.

The process of intermixture of characters has gone far in existing populations and through the ease of modern methods of transportation this process is going much further in Europe and in America. The results of such mixture are not blends or intermediate types, but rather mosaics of contrasted characters. Such blends, if any, as ultimately occur are too remote to concern us here.

The crossing of an individual of pure brunet race with an individual of pure blond race produces in the first generation offspring which are distinctly dark. In subsequent generations, brunets and blonds appear in various proportions but the former tend to be much the more numerous. The blond is consequently said to be recessive to the brunet because it recedes from view in the first generation. This or any similar recessive or suppressed trait is not lost to the germ plasm, but reappears in later generations of the hybridized stock. A similar rule prevails with other physical characters.

In defining race in Europe it is necessary not only to consider pure groups or pure types but also the distribution of characters belonging to each particular subspecies of man found there. The interbreeding of these populations has progressed to such an extent that in many cases such an analysis of physical characters is necessary to reconstruct the elements which have entered into their ethnic composition. To rely on averages alone leads to misunderstanding and to disregard of the relative proportion of pure, as contrasted with mixed types.

Sometimes we find a character appearing here and there as the sole remnant of a once numerous race, for example, the rare appearance in European populations of a skull of the Neanderthal type, a race widely spread over Europe 40,000 years ago, or of the Cro-Magnon type, the predominant race 16,000 years ago. Before the fossil remains of the Neanderthal and Cro-Magnon races were studied and understood such reversional specimens were considered pathological, instead of being recognized as the reappearance of an ancient and submerged type.

These physical characters are to all intents and purposes immutable and they do not change during the lifetime of a language or an empire. The skull shape of the Egyptian fellaheen, in the unchanging environment of the Nile Valley, is absolutely identical in measurements, proportions and capacity with skulls found in the predynastic tombs dating back more than six thousand years.

√ There exists to-day a widespread and fatuous belief in the power of environment, as well as of education and opportunity to alter heredity, which arises from the dogma of the brotherhood of man, derived in its turn from the loose thinkers of the French Revolution and their American mimics. Such beliefs have done much damage in the past and if allowed to go uncontradicted, may do even more serious damage in the future. Thus the view that the Negro slave was an unfortunate cousin of the white man, deeply tanned by the tropic sun and denied the blessings of Christianity and civilization, played no small part with the sentimentalists of the Civil War period and it has taken us fifty years to learn that speaking English, wearing good clothes and going to school and to church do not transform a Negro into a white man. Nor was a Syrian or Egyptian freedman transformed into a Roman by wearing a toga and applauding his favorite gladiator in the amphitheatre. Americans will have a similar experience with the Polish Jew, whose dwarf stature, peculiar mentality and ruthless concentration on self-interest are being engrafted upon the stock of the nation.

Recent attempts have been made in the interest of inferior races among our immigrants to show that the shape of the skull does change, not merely in a century, but in a single generation. In 1910, the report of the anthropological expert of the Congressional Immigration Commission gravely declared that a round skull Jew on his way across the Atlantic might and did have a round skull child; but a few years later, in response to the subtle elixir of American institutions as exemplified in an East Side tenement, might and did have a child whose skull was appreciably longer; and that a long skull south Italian, breeding freely, would have precisely the same experience in the reverse direction. In other words the Melting Pot was acting instantly under the influence of a changed environment.

What the Melting Pot actually does in practice can be seen in Mexico, where the absorption of the blood of the original Spanish conquerors by the native Indian population has produced the racial mixture which we call Mexican and which is now engaged in demonstrating its incapacity for self-government. The world has seen many such mixtures and the character of a mongrel race is only just beginning to be understood at its true value.

It must be borne in mind that the specializations which characterize the higher races are of relatively recent development, are highly unstable and when mixed with generalized or primitive characters tend to disappear. Whether we like to admit it or not, the result of the mixture of two races, in the long run, gives us a race reverting to the more ancient, generalized and lower type. The cross between a white man and an Indian is an Indian; the cross between a white man and a Negro is a Negro; the cross between a white man and a Hindu is a Hindu; and the cross between any of the three European races and a Jew is a Jew.

In the crossing of the blond and brunet elements of a population, the more deeply rooted and ancient dark traits are prepotent or dominant. This is matter of every-day observation and the working of this law of nature is not influenced or affected by democratic institutions or by religious beliefs. Nature cares not for the individual nor how he may be modified by environment. She is concerned only with the perpetuation of the species or type and heredity alone is the medium through which she acts.

As measured in terms of centuries these characters are fixed and rigid and the only benefit to be derived from a changed environment and better food conditions is the opportunity afforded a race which has lived under adverse conditions to achieve its maximum development but the limits of that development are fixed for it by heredity and not by environment.

In dealing with European populations the best method of determining race has been found to lie in a comparison of proportions of the skull, the so-called cephalic index. This is the ratio of maximum *width*, taken at the widest part of the skull above the ears, to maximum *length*. Skulls with an index of 75 or less, that is, those with a width that is three-fourths of the length or less, are considered dolichocephalic or long skulls. Skulls of an index of 80 or over are round or brachycephalic skulls. Intermediate indices, between 75 and 80, are considered mesaticephalic. These are cranial indices. To allow for the flesh on living specimens about two per cent is to be added to this index and the result is the cephalic index. In the following pages only long and round skulls are considered and the intermediate forms are assigned to the dolichocephalic group.

This cephalic index, though an extremely important if not the controlling character, is, nevertheless, but a single character and must be checked up with other somatological traits. Normally, a long skull is associated with a long face and a round skull with a round face.

The use of this test, the cephalic index, enables us to divide the great bulk of the European populations into three distinct subspecies of man, one northern and one southern, both dolichocephalic or characterized by a long skull and a central subspecies which is brachycephalic or characterized by a round skull.

The first is the Nordic or Baltic subspecies. This race is long skulled, very tall, fair skinned with blond or brown hair and light colored eyes. The Nordics inhabit the countries around the North and Baltic Seas and include not only the great Scandinavian and Teutonic groups, but also other early peoples who first appear in southern Europe and in Asia as representatives of Aryan language and culture.

The second is the dark Mediterranean or Iberian subspecies, occupying the shores of the inland sea and extending along the Atlantic coast until it reaches the Nordic species. It also spreads far east into southern Asia. It is long skulled like the Nordic race but the absolute size of the skull is less. The eyes and hair are very dark or black and the skin more or less swarthy. The stature is distinctly less than that of the Nordic race and the musculature and bony framework weak.

The third is the Alpine subspecies occupying all central and eastern Europe and extending through Asia Minor to the Hindu Kush and the Pamirs. The Armenoids constitute an Alpine subdivision and may possibly represent the ancestral type of this race which remained in the mountains and high plateaux of Anatolia and western Asia.

The Alpines are round skulled, of medium height and sturdy build both as to skeleton and muscles. The coloration of both hair and eyes was originally very dark and still tends strongly in that direction but many light colored eyes, especially gray, are now common among the Alpine populations of western Europe.

While the inhabitants of Europe betray as a whole their mixed origin, nevertheless, individuals of each of the three main subspecies are found in large numbers and in great purity, as well as sparse remnants of still more ancient races represented by small groups or by individuals and even by single characters.

These three main groups have bodily characters which constitute them distinct subspecies. Each group is a large one and includes several well-marked varieties, which differ even more widely in cultural development than in physical divergence so that when the Mediterranean of England is compared with the Hindu, or the Alpine Savoyard with the Rumanian or Turcoman, a wide gulf is found.

In zoology, related species when grouped together constitute subgenera and genera and the term species implies the existence of a certain definite amount of divergence from the most closely related type but race does not require a similar amount of difference. In man, where all groups are more or less fertile when crossed, so many intermediate or mixed types occur that the word species has at the present day too extended a meaning.

For the sake of clearness the word race and not the word species or subspecies will be used in the following chapters as far as possible.

The old idea that fertility or infertility of races of animals was the measure of species is now abandoned. One of the greatest difficulties in classifying man is his perverse predisposition to mismate. This is a matter of daily observation, especially among the women of the better classes, probably because of their wider range of choice.

There must have existed many subspecies and species, if not genera, of men since the Pliocene and new discoveries of their remains may be expected at any time and in any part of the eastern hemisphere.

The cephalic index is of less value in the classification of Asiatic populations but the distribution of round and long skulls is similar to that in Europe. The vast central plateau of that continent is inhabited by round skulls. In fact, Thibet and the western Himalayas were probably the centre of radiation of all the round skulls of the world. In India and Persia south of this central area occurs a long skull race related to Mediterranean man in Europe.

Both skull types occur much intermixed among the American Indians and the cephalic index is of little value in classifying the Amerinds. No satisfactory explanation of the variability of the skull shape in the western hemisphere has as yet been found, but the total range of variation of physical characters among them, from northern Canada to southern Patagonia, is less than the range of such variation from Normandy to Provence in France.

In Africa the cephalic index is also of small classification value because all of the populations are characterized by a long skull.

The distinction between a long skull and a round skull in mankind probably goes back at least to early Paleolithic times, if not to a period still more remote. It is of such great antiquity that when new species or races appear in Europe at the close of the Paleolithic, between 10,000 and 7,000 years B. C., the skull characters among them are as clearly defined as they are to-day.

The fact that two distinct species of mankind have long skulls, as have the north European and the African Negro, is no necessary indication of relationship and in that instance is merely a case of parallel specialization, but the fact, however, that the Swede has a long skull and the Savoyard a round skull does prove them to be racially distinct.

The claim that the Nordic race is a mere variation of the Mediterranean race and that the latter is in turn derived from the Ethiopian Negro rests upon a mistaken idea that a dolichocephaly in common must mean identity of origin, as well as upon a failure to take into consideration many somatological characters of almost equal value with the cephalic index. Indeed, the cephalic index, being merely a ratio, may be identical for skulls differing in every other proportion and detail, as well as in absolute size and capacity.

Eye color is of very great importance in race determination because all blue, gray or green eyes in the world to-day came originally from the same source, namely, the Nordic race of northern Europe. This light colored eye has appeared nowhere else on earth, is a specialization of this subspecies of man only and consequently is of extreme value in the classification of European races. Dark colored eyes are all but universal among wild mammals and entirely so among the primates, man's nearest relatives. It may be taken as an absolute certainty that all the original races of man had dark eyes.

One subspecies of man and one alone specialized in light colored eyes. This same subspecies also evolved light brown or blond hair, a character far less deeply rooted than eye color, as blond children tend to grow darker with advancing years and populations partly of Nordic extraction, such as those of Lombardy, upon admixture with darker races lose their blond hair more readily than their light colored eyes. In short, light colored eyes are far more common than light colored hair. In crosses between Alpines and Nordics, the Alpine stature and the Nordic eye appear to prevail. Light color in eyes is largely due to a greater or less absence of pigment but it is not associated with weak eyesight, as in the case of Albinos. In fact, among marksmen, it has been noted that nearly all the great rifle-shots in England or America have had light colored eyes.

Blond hair also comes everywhere from the Nordic subspecies and from nowhere else. Whenever we find blondness among the darker races of the earth we may be sure some Nordic wanderer has passed that way. When individuals of perfect blond type occur, as sometimes in Greek islands, we may suspect a recent visit of sailors from a passing ship but when only single characters remain spread thinly, but widely, over considerable areas, like the blondness of the Atlas Berbers or of the Albanian mountaineers, we must search in the dim past for the origin of these blurred traits of early invaders.

The range of blond hair color in pure Nordic peoples runs from flaxen and red to shades of chestnut and brown. The darker shades may indicate crossing in some cases, but absolutely black hair certainly does mean an ancestral cross with a dark race—in England with the Mediterranean race.

It must be clearly understood that blondness of hair and of eye is not a final test of Nordic race. The Nordics include all the blonds, and also those of darker hair or eye when possessed of a preponderance of other Nordic characters. In this sense the word "blond" means those lighter shades of hair or eye color in contrast to the very dark or black shades which are termed brunet. The meaning of "blond" as now used is therefore not limited to the lighter or flaxen shades as in colloquial speech.

In England among Nordic populations there are large numbers of individuals with hazel brown eyes joined with the light brown or chestnut hair which is the typical hair shade of the English and Americans. This combination is also common in Holland and Westphalia and is frequently associated with a very fair skin. These men are all of "blond" aspect and constitution and consequently are to be classed as members of the Nordic race.

In Nordic populations the women are, in general, lighter haired than the men, a fact which points to a blond past and a darker future for those populations. Women in all human races, as the females among all mammals, tend to exhibit the older, more generalized and primitive traits of the past of the race. The male in his individual development indicates the direction in which the race is tending under the influence of variation and selection.

It is interesting to note in connection with the more primitive physique of the female, that in the spiritual sphere also women retain the ancient and intuitive knowledge that the great mass of mankind is not free and equal but bond and unequal.

The color of the skin is a character of importance but one that is exceedingly hard to measure as the range of variation in Europe between skins of extreme fairness and those that are exceedingly swarthy is almost complete. The Nordic race in its purity has an absolutely fair skin and is consequently the white man par excellence.

Many members of the Nordic race otherwise apparently pure have skins, as well as hair, more or less dark, so that the determinative value of this character is uncertain. There can be no doubt that the quality of the skin and the extreme range of its variation in color from black, brown, red, yellow to ivory-white are excellent measures of the specific or subgeneric distinctions between the larger groups of mankind but in dealing with European populations it is sometimes difficult to correlate the shades of fairness with other physical characters.

In general, hair color and skin color are linked together, but it often happens that an individual with all other Nordic characters in great purity has a skin of an olive or dark tint. Even more frequently we find individuals with absolutely pure brunet traits in possession of a skin of almost ivory whiteness and of great clarity. This last combination is very frequent among the brunets of the British Isles. That these are, to some extent, disharmonic combinations we may be certain but beyond that our knowledge does not lead. Women, however, of fair skin have always been the objects of keen envy by those of the sex whose skins are black, yellow or red.

Stature is another character of greater value than skin color and, perhaps, than hair color and is one of much importance in European classification for on that continent we have the most extreme variations of human height.

Exceedingly adverse economic conditions may inhibit a race from attaining the full measure of its growth and to this extent environment plays its part in determining stature but fundamentally it is race, always race, that sets the limit. The tall Scot and the dwarfed Sardinian owe their respective sizes to race and not to oatmeal or olive oil. It is probable, however, that the fact that the stature of the Irish is, on the average, shorter than that of the Scotch is due partly to economic conditions and partly to the depressive effect of a considerable population of primitive short stock.

The Mediterranean race is everywhere marked by a relatively short stature, sometimes greatly depressed, as in south Italy and in Sardinia, and also by a comparatively light bony framework and feeble muscular development.

The Alpine race is taller than the Mediterranean, although shorter than the Nordic, and is characterized by a stocky and sturdy build. The Alpines rarely, if ever, show the long necks and graceful figures so often found in the other two races.

The Nordic race is nearly everywhere distinguished by great stature. Almost the tallest stature in the world is found among the pure Nordic populations of the Scottish and English borders while the native British of Pre-Nordic brunet blood are for the most part relatively short. No one can question the race value of stature who observes on the streets of London the contrast between the Piccadilly gentleman of Nordic race and the cockney costermonger of the old Neolithic type.

In some cases where these three European races have become mixed stature seems to be one of the first Nordic characters to vanish, but wherever in Europe we find great stature in a population otherwise lacking in Nordic characters we may suspect a Nordic crossing, as in the case of a large proportion of the inhabitants of Burgundy, of the Tyrol and of the Dalmatian Alps south to Albania.

These four characters, skull shape, eye color, hair color and stature, are sufficient to enable us to differentiate clearly between the three main subspecies of Europe, but if we wish to discuss the minor variations in each race and mixtures between them, we must go much further and take up other proportions of the skull than the cephalic index, as well as the shape and position of the eyes, the proportions and shape of the jaws, the chin and other features.

The nose is an exceedingly important character. The original human nose was, of course, broad and bridgeless. This trait is shown clearly in new-born infants who recapitulate in their development the various stages of the evolution of the human genus. A bridgeless nose with wide, flaring nostrils is a very primitive character and is still retained by some of the larger divisions of mankind throughout the world. It appears occasionally in white populations of European origin but is everywhere a very ancient, generalized and low character.

The high bridge and long, narrow nose, the so-called Roman, Norman or aquiline nose, is characteristic of the most highly specialized races of mankind. While an apparently unimportant character, this feature is one of the very best clews to racial origin and in the details of its form, and especially in the lateral shape of the nostrils, is a race determinant of the greatest value.

The lips, whether thin or fleshy or whether clean-cut or everted, are race characters. Thick, protruding, everted lips are very ancient traits and are characteristic of many primitive races. A high instep also has long been esteemed an indication of patrician type while the flat foot is often the test of lowly origin.

The absence or abundance of hair and beard and the relative absence or abundance of body hair are characters of no little value in classification. Abundant body hair is, to a large extent, peculiar to populations of the very highest as well as the very lowest species, being characteristic of the north European as well as of the Australian savages. It merely means the retention in both these groups of a very early and primitive trait which has been lost by the Negroes, Mongols and Amerinds.

The Nordic and Alpine races are far better equipped with head and body hair than the Mediterranean, which is throughout its range a glabrous or relatively naked race but among the Nordics the extreme blond types are less equipped with body hair or down than are darker members of the race. A contrast in color between head hair and beard, the latter always being lighter than the former, may be one of the results of an ancient crossing of races.

The so-called red haired branch of the Nordic race has special characters in addition to red hair, such as a greenish cast of eye, a skin of delicate texture tending either to great clarity or to freckles and certain peculiar temperamental traits. This was probably a variety closely related to the blonds and it first appears in history in association with them.

While the three main European races are the subject of this book and while it is not the intention of the author to deal with the other human types, it is desirable in connection with the discussion of this character, hair, to state that the three European subspecies are subdivisions of one of the primary groups or species of the genus *Homo* which, taken together, we may call the Caucasian for lack of a better name.

The existing classification of man must be radically revised, as the differences between the most divergent human types are far greater than are usually deemed sufficient to constitute separate species and even subgenera in the animal kingdom at large. Outside of the three European subspecies the greater portion of the genus *Homo* can be roughly divided into the Negroes and Negroids, and the Mongols and Mongoloids.

The former apparently originated in south Asia and entered Africa by way of the northeastern corner of that continent. Africa south of the Sahara is now the chief home of this race, though remnants of Negroid aborigines are found throughout south Asia from India to the Philippines, while the very distinct black Melanesians and the Australoids lie farther to the east and south.

The Mongoloids include the round skulled Mongols and their derivatives, the Amerinds or American Indians. This group is essentially Asiatic and occupies the centre and the eastern half of that continent.

A description of these Negroids and Mongoloids and their derivatives, as well as of certain aberrant species of man, lies outside the scope of this work.

In the structure of the head hair of all races of mankind we find a regular progression from extreme kinkiness to lanky straightness and this straightness or curliness depends on the shape of the cross section of the hair itself. This cross section has three distinct forms, corresponding with the most extreme divergences among human species.

The cross section of the hair of the Negroes is a flat ellipse with the result that they all have kinky hair. This kinkiness of the Negroes' hair is also due somewhat to the acute angle at which the hair is set into the skin and the peppercorn form of hair probably represents an extreme specialization.

The cross section of the hair of the Mongols and their derivatives, the Amerinds, is a complete circle and their hair is perfectly straight and lank.

The cross section of the hair of the so-called Caucasians, including the Mediterranean, Alpine and Nordic subspecies, is an oval ellipse and consequently is intermediate between the cross sections of the Negroes and Mongoloids. Hair of this structure is wavy or curly, never either kinky or absolutely straight and is characteristic of all the European populations almost without exception.

Of these three hair types the straighter forms most closely represent the earliest human form of hair.

We have confined the discussion to the most important characters but there are many other valuable aids to classification to be found in the proportions of the body and the relative length of the limbs. In this latter respect, it is a matter of common knowledge that there occur two distinct types, the one long legged and short bodied, the other long bodied and short legged.

Without going into further physical details, it is probable that all relative proportions in the body, the features, the skeleton and the skull which are fixed and constant and lie outside of the range of individual variation represent dim inheritances from the past. Every generation of human beings carries the blood of thousands of ancestors, stretching back through thousands of years, superimposed upon a prehuman inheritance of still greater antiquity and the face and body of every living man offer an intricate mass of hieroglyphs that science will some day learn to read and interpret.

Only the foregoing main characters will be used as the basis for determining race and attention will be called later to such temperamental and spiritual traits as seem to be associated with distinct physical types.

We shall discuss only European populations and, as said, shall not deal with exotic and alien races scattered among them nor with those quarters of the globe where the races of man are such that other physical characters must be called upon to provide clear definitions.

A fascinating subject would open up if we were to dwell upon the effect of racial combinations and disharmonies, as, for instance, where the mixed Nordic and Alpine populations of Lombardy usually retain the skull shape, hair color and stature of the Alpine race, with the light eye color of the

Nordic race, or where the mountain populations along the east coast of the Adriatic from the Tyrol to Albania have the stature of the Nordic race and an Alpine skull and coloration.

III

RACE AND HABITAT

The laws which govern the distribution of the various races of man and their evolution through selection are substantially the same as those controlling the evolution and distribution of the larger mammals.

Man, however, with his superior mentality has freed himself from many of the conditions which impose restraint upon the expansion of animals. In his case selection through disease and social and economic competition has largely replaced selection through adjustment to the limitations of food supply.

Man is the most cosmopolitan of animals and in one form or another thrives in the tropics and in the arctics, at sea level and on high plateaux, in the desert and in the reeking forests of the equator. Nevertheless, the various races of Europe have each a certain natural habitat in which it achieves its highest development.

The Nordic Habitat

The Nordics appear in their present centre of distribution, the basin of the Baltic, at the close of the Paleolithic, as soon as the retreating glaciers left habitable land. This race was probably at that time in possession of its fundamental characters, and its extension from the plains of Russia to Scandinavia was not in the nature of a radical change of environment. The race in consequence is now, always has been and probably always will be, adjusted to certain environmental conditions, chief of which is protection from a tropical sun. The actinic rays of the sun at the same latitude are uniform in strength the world over and continuous sunlight affects adversely the delicate nervous organization of the Nordics. The fogs and long winter nights of the North serve as a protection from too much sun and from its too direct rays.

Scarcely less important is the presence of a large amount of moisture but above all a constant variety of temperature is needed. Sharp contrast between night and day temperature and between summer and winter are necessary to maintain the vigor of the Nordic race at a high pitch. Uniform weather, if long continued, lessens its energy. Too great extremes as in midwinter or midsummer in parts of New England are injurious. Limited but constant alternations of heat and cold, of moisture and dryness, of sun and clouds, of calm and cyclonic storms offer the ideal surroundings.

Where the environment is too soft and luxurious and no strife is required for survival, not only are weak strains and individuals allowed to survive and encouraged to breed but the strong types also grow fat mentally and physically, like overfed Indians on reservations or wingless birds on oceanic islands, which have lost the power of flight as a result of prolonged protective conditions.

Men of the Nordic race may not enjoy the fogs and snows of the North, the endless changes of weather and the violent fluctuations of the thermometer and they may seek the sunny southern isles, but under the former conditions they flourish, do their work and raise their families. In the south they grow listless and cease to breed.

In the lower classes in the Southern States of America the increasing proportion of "poor whites" and "crackers" are symptoms of lack of climatic adjustment. The whites in Georgia, in the Bahamas and, above all, in Barbadoes are excellent examples of the deleterious effects of residence outside the natural habitat of the Nordic race.

The poor whites of the Cumberland Mountains in Kentucky and Tennessee present a more difficult problem, because here the altitude, even though moderate, should modify the effects of latitude and the climate of these mountains cannot be particularly unfavorable to men of Nordic breed. There are probably other hereditary forces at work there as yet little understood.

No doubt bad food and economic conditions, prolonged inbreeding and the loss through emigration of the best elements have played a large part in the degeneration of these mountaineers. They represent to a large extent the offspring of indentured servants brought over by the rich planters in early Colonial times and their names indicate that many of them are the descendants of the old borderers along the Scotch and English frontier. The persistence with which family feuds are maintained certainly points to such an origin. The physical type is typically Nordic, for the most part pure Saxon or Anglian, and the whole mountain population show somewhat aberrant but very pronounced physical, moral and mental characteristics which would repay scientific investigation. The problem is too complex to be disposed of by reference to the hookworm, illiteracy or competition with Negroes.

This type played a large part in the settlement of the Middle West, by way of Kentucky, Tennessee and Missouri. Thence they passed both up the Missouri River and down the Santa Fé trail and contributed rather more than their share of the train robbers, horse thieves and bad men of the West.

Scotland and the Bahamas are inhabited by men of precisely the same race, but the vigor of the English in the Bahamas is gone and the beauty of their women has faded. The fact that they were not in competition with an autochthonous race better adjusted to climatic conditions has enabled them to survive, but the type could not have persisted, even during the last two hundred years, if they had been compelled to compete on terms of equality with a native and acclimated population.

Another element entering into racial degeneration on many other islands and for that matter in many New England villages, is the loss through emigration of the more vigorous and energetic individuals, leaving behind the less efficient to continue the race at home.

In subtropical countries where the energy of the Nordics is at a low ebb it would appear that the racial inheritance of physical strength and mental vigor was suppressed and recessive rather than destroyed. Many individuals born in unfavorable climatic surroundings, who move back to the original habitat of their race in the north, recover their full quota of energy and vigor. New York and other Northern cities have many Southerners who are fully as efficient as pure Northerners.

This Nordic race can exist outside of its native environment as land owning aristocrats who are not required to do manual labor in the fields under a blazing sun. As such an aristocracy it continues to exist under Italian skies, but as a field laborer the man of Nordic blood cannot compete with his Alpine or Mediterranean rival. It is not to be supposed that the various Nordic tribes and armies, which for a thousand years after the fall of Rome poured down from the Alps like the glaciers to melt in the southern sun, were composed solely of knights and gentlemen who became the landed nobility of Italy. The man in the ranks also took up his land and work in Italy, but he had to compete directly with the native under climatic conditions which were unfavorable to his race. In this competition the blue eyed Nordic giant died and the native survived. His officer, however, lived in the castle and directed the labor of his bondsmen without other preoccupation than the chase and war and he long maintained his vigor.

The same thing happened in our South before the Civil War. There the white men did not work in the fields or in the factory. The heavy work under the blazing sun was carried on by Negro slaves and the planter was spared exposure to an unfavorable environment. Under these conditions he was able to retain much of his vigor. When slavery was abolished and the white man had to plough his own fields or work in the factory deterioration began.

The change in type of the men who are now sent by the Southern States to represent them in the Federal Government from their predecessors in ante-bellum times is partly due to these causes, but in greater degree it is to be attributed to the fact that a large portion of the best racial strains in the South were killed off during the Civil War. In addition the war shattered the aristocratic traditions which formerly secured the selection of the best men as rulers. The new democratic ideals, with universal suffrage in free operation among the whites, result in the choice of representatives who lack the distinction and ability of the leaders of the Old South.

A race may be thoroughly adjusted to a certain country at one stage of its development and be at a disadvantage when an economic change occurs, such as was experienced in England a century ago when the nation changed from an agricultural to a manufacturing community. The type of man that flourishes in the fields is not the type of man that thrives in the factory, just as the type of man required for the crew of a sailing ship is not the type useful as stokers on a modern steamer.

The Habitat of the Alpines and Mediterraneans

The environment of the Alpine race seems to have always been the mountainous country of central and eastern Europe, as well as western Asia, but they are now spreading into the plains, notably in Poland and Russia. This type has never flourished in the deserts of Arabia or the Sahara, nor has it succeeded well in maintaining its early colonies in the northwest of Europe within the domain of the Nordic long heads. It is, however, a sturdy and persistent stock and, while much of it may not be overrefined or cultured, undoubtedly possesses great potentialities for future development.

The Alpines in the west of Europe, especially in Switzerland and the districts immediately surrounding, have been so thoroughly Nordicized and so saturated with the culture of the adjoining nations that they stand in sharp contrast to backward Alpines of Slavic speech in the Balkans and east of Europe.

The Mediterranean race, on the other hand, is clearly a southern type with eastern affinities. It is a type that did not endure in the north of Europe under former agricultural conditions nor is it suitable to the farming districts and frontiers of America and Canada. It is adjusted to subtropical and tropical countries better than any other European type and will flourish in our Southern States and around the coasts of the Spanish Main. In France it is well known that members of the Mediterranean race are better adapted for colonization in Algeria than are French Alpines or Nordics. This subspecies of man is notoriously intolerant of extreme cold, owing to its susceptibility to diseases of the lungs and it shrinks from the blasts of the northern winter in which the Nordics revel.

The brunet Mediterranean element in the native American seems to be increasing at the expense of the blond Nordic element generally throughout the Southern States and probably also in the large cities. This type of man, however, is scarce on our frontiers. In the Northwest and in Alaska in the days of the gold rush it was in the mining camps a matter of comment if a man turned up with dark eyes, so universal were blue and gray eyes among the American pioneers.

IV

THE COMPETITION OF RACES

Where two races occupy a country side by side, it is not correct to speak of one type as changing into the other. Even if present in equal numbers one of the two contrasted types will have some small advantage or capacity which the other lacks toward a perfect adjustment to surroundings. Those possessing these favorable variations will flourish at the expense of their rivals and their offspring will not only be more numerous, but will also tend to inherit such variations. In this way one type gradually breeds the other out. In this sense, and in this sense only, do races change.

Man continuously undergoes selection through the operation of the forces of social environment. Among native Americans of the Colonial period a large family was an asset and social pressure and economic advantage counselled both early marriage and numerous children. Two hundred years of continuous political expansion and material prosperity changed these conditions and children, instead of being an asset to till the fields and guard the cattle, became an expensive liability. They now require support, education and endowment from their parents and a large family is regarded by some as a serious handicap in the social struggle.

These conditions do not obtain at first among immigrants, and large families among the newly arrived population are still the rule, precisely as they were in Colonial America and are to-day in French Canada where backwoods conditions still prevail.

The result is that one class or type in a population expands more rapidly than another and ultimately replaces it. This process of replacement of one type by another does not mean that the race changes or is transformed into another. It is a replacement pure and simple and not a transformation.

The lowering of the birth rate among the most valuable classes, while the birth rate of the lower classes remains unaffected, is a frequent phenomenon of prosperity. Such a change becomes extremely injurious to the race if unchecked, unless nature is allowed to maintain by her own cruel devices the relative numbers of the different classes in their due proportions. To attack race suicide by encouraging indiscriminate reproduction is not only futile but is dangerous if it leads to an increase in the undesirable elements. What is needed in the community most of all is an increase in the desirable classes, which are of superior type physically, intellectually and morally and not merely an increase in the absolute numbers of the population.

The value and efficiency of a population are not numbered by what the newspapers call souls, but by the proportion of men of physical and intellectual vigor. The small Colonial population of America was, on an average and man for man, far superior to the present inhabitants, although the latter are twenty-five times more numerous. The ideal in eugenics toward which statesmanship should be directed is, of course, improvement in quality rather than quantity. This, however, is at present a counsel of perfection and we must face conditions as they are.

The small birth rate in the upper classes is to some extent offset by the care received by such children as are born and the better chance they have to become adult and breed in their turn. The large birth rate of the lower classes is under normal conditions offset by a heavy infant mortality, which eliminates the weaker children.

Where altruism, philanthropy or sentimentalism intervene with the noblest purpose and forbid nature to penalize the unfortunate victims of reckless breeding, the multiplication of inferior types is encouraged and fostered. Indiscriminate efforts to preserve babies among the lower classes often result in serious injury to the race. At the existing stage of civilization, the legalizing of birth control would probably be of benefit by reducing the number of offspring in the undesirable classes. Regulation of the number of children is, for good or evil, in full operation among the better classes and its recognition by the state would result in no further harm among them.

Mistaken regard for what are believed to be divine laws and a sentimental belief in the sanctity of human life tend to prevent both the elimination of defective infants and the sterilization of such adults as are themselves of no value to the community. The laws of nature require the obliteration of the unfit and human life is valuable only when it is of use to the community or race.

It is highly unjust that a minute minority should be called upon to supply brains for the unthinking mass of the community, but it is even worse to burden the responsible and larger but still overworked elements in the community with an ever increasing number of moral perverts, mental defectives and hereditary cripples. As the percentage of incompetents increases, the burden of their support will become ever more onerous until, at no distant date, society will in self-defense put a stop to the supply of feebleminded and criminal children of weaklings.

The church assumes a serious responsibility toward the future of the race whenever it steps in and preserves a defective strain. The marriage of deaf mutes was hailed a generation ago as a triumph of humanity. Now it is recognized as an absolute crime against the race. A great injury is done to the community by the perpetuation of worthless types. These strains are apt to be meek and lowly and as such make a strong appeal to the sympathies of the successful. Before eugenics were understood much could be said from a Christian and humane viewpoint in favor of indiscriminate charity for the benefit of the individual. The societies for charity, altruism or extension of rights, should have in these days, however, in their management some small modicum of brains, otherwise they may continue to do, as they have sometimes done in the past, more injury to the race than black death or smallpox.

As long as such charitable organizations confine themselves to the relief of suffering individuals, no matter how criminal or diseased they may be, no harm is done except to our own generation and if modern society recognizes a duty to the humblest malefactors or imbeciles that duty can be harmlessly performed in full, provided they be deprived of the capacity to procreate their defective strain.

Those who read these pages will feel that there is little hope for humanity, but the remedy has been found, and can be quickly and mercifully applied. A rigid system of selection through the elimination of those who are weak or unfit—in other words, social failures—would solve the whole question in a century, as well as enable us to get rid of the undesirables who crowd our jails, hospitals and insane asylums. The individual himself can be nourished, educated and protected by the community during his lifetime, but the state through sterilization must see to it that his line stops with him or else future generations will be cursed with an ever increasing load of victims of misguided sentimentalism. This is a practical, merciful and inevitable solution of the whole problem and can be applied to an ever widening circle of social discards, beginning always with the criminal, the diseased and the insane and extending gradually to types which may be called weaklings rather than defectives and perhaps ultimately to worthless race types.

Efforts to increase the birth rate of the genius producing classes of the community, while most desirable, encounter great difficulties. In such efforts we encounter social conditions over which we have as yet no control. It was tried two thousand years ago by Augustus and his efforts to avert race suicide and the extinction of the old Roman stock were singularly prophetic of what some far seeing men are attempting in order to preserve the race of native Americans of Colonial descent.

Man has the choice of two methods of race improvement. He can breed from the best or he can eliminate the worst by segregation or sterilization. The first method was adopted by the Spartans, who had for their national ideals military efficiency and the virtues of self-control, and along these lines the results were completely successful. Under modern social conditions it would be extremely difficult in the first instance to determine which were the most desirable types, except in the most general way and even if a satisfactory selection were finally made, it would be in a democracy a virtual impossibility to limit by law the right to breed to a privileged and chosen few.

Interesting efforts to improve the quality as well as the quantity of the population, however, will probably be made in more than one country after the war has ended.

Experiments in limiting reproduction to the undesirable classes were unconsciously made in mediæval Europe under the guidance of the church. After the fall of Rome social conditions were such that all those who loved a studious and quiet life were compelled to seek refuge from the violence of the times in monastic institutions and upon such the church imposed the obligation of celibacy and thus deprived the world of offspring from these desirable classes.

In the Middle Ages, through persecution resulting in actual death, life imprisonment and banishment, the free thinking, progressive and intellectual elements were persistently eliminated over large areas, leaving the perpetuation of the race to be carried on by the brutal, the servile and the stupid. It is now impossible to say to what extent the Roman Church by these methods has impaired the brain capacity of Europe, but in Spain alone, for a period of over three centuries from the years 1471 to 1781, the Inquisition condemned to the stake or imprisonment an average of 1,000 persons annually. During these three centuries no less than 32,000 were burned alive and 291,000 were condemned to various terms of imprisonment and other penalties and 17,000 persons were burned in effigy, representing men who had died in prison or had fled the country.

No better method of eliminating the genius producing strains of a nation could be devised and if such were its purpose the result was eminently satisfactory, as is demonstrated by the superstitious and unintelligent Spaniard of to-day. A similar elimination of brains and ability took place in northern Italy, in France and in the Low Countries, where hundreds of thousands of Huguenots were murdered or driven into exile.

Under existing conditions the most practical and hopeful method of race improvement is through the elimination of the least desirable elements in the nation by depriving them of the power to contribute to future generations. It is well known to stock breeders that the color of a herd of cattle can be modified by continuous destruction of worthless shades and of course this is true of other characters. Black sheep, for instance, have been practically obliterated by cutting out generation after generation all animals that show this color phase, until in carefully maintained flocks a black individual only appears as a rare sport.

In mankind it would not be a matter of great difficulty to secure a general consensus of public opinion as to the least desirable, let us say, ten per cent of the community. When this unemployed and unemployable human residuum has been eliminated together with the great mass of crime, poverty, alcoholism and feeblemindedness associated therewith it would be easy to consider the advisability of further restricting the perpetuation of the then remaining least valuable types. By this method mankind might ultimately become sufficiently intelligent to choose deliberately the most vital and intellectual strains to carry on the race.

In addition to selection by climatic environment man is now, and has been for ages, undergoing selection through disease. He has been decimated throughout the centuries by pestilences such as the black death and bubonic plague. In our fathers' days yellow fever and smallpox cursed humanity. These plagues are now under control, but similar diseases now regarded as mere nuisances to childhood, such as measles, mumps and scarlatina, are terrible scourges to native populations without previous experience with them. Add to these smallpox and other white men's diseases and one has the great empire builders of yesterday. It was not the swords in the hands of Columbus and his followers that decimated the American Indians, it was the germs that his men and their successors brought over, implanting the white man's maladies in the red man's world. Long before the arrival of the Puritans in New England, smallpox had flickered up and down the coast until the natives were but a broken remnant of their former numbers.

At the present time the Nordic race is undergoing selection through alcoholism, a peculiarly Nordic vice, and through consumption. Both these dread scourges unfortunately attack those members of the race that are otherwise most desirable, differing in this respect from filth diseases like typhus, typhoid or smallpox. One has only to look among the more desirable classes for the victims of rum and tubercule to realize that death or mental and physical impairment through these two causes have cost the race many of its most brilliant and attractive members.

V

RACE, LANGUAGE AND NATIONALITY

NATIONALITY is an artificial political grouping of population usually centring around a single language as an expression of traditions and aspirations. Nationality can, however, exist independently of language but states thus formed, such as Belgium or Austria, are far less stable than those where a uniform language is prevalent, as, for example, France or England.

States without a single national language are constantly exposed to disintegration, especially where a substantial minority of the inhabitants speak a tongue which is predominant in an adjoining state and, as a consequence, tend to gravitate toward such state.

The history of the last century in Europe has been the record of a long series of struggles to unite in one political unit all those speaking the same or closely allied dialects. With the exception of internal and social revolutions, every European war since the Napoleonic period has been caused by the effort to bring about the unification either of Italy or of Germany or by the desperate attempts of the Balkan States to struggle out of

Turkish chaos into modern European nations on a basis of community of language. The unification of both Italy and Germany is as yet incomplete according to the views held by their more advanced patriots and the solution of the Balkan question is still in the future.

Men are keenly aware of their nationality and are very sensitive about their language, but only in a few cases, notably in Sweden and Germany, does any large section of the population possess anything analogous to true race consciousness, although the term "race" is everywhere misused to designate linguistic or political groups.

The unifying power of a common language works subtly and unceasingly. In the long run it forms a bond which draws peoples together—as the English-speaking peoples of the British Empire with those of America. In the same manner this linguistic sympathy will bring the German-speaking Austrians into a closer political community with the rest of Germany and will hold together all the German-speaking provinces.

It sometimes happens that a section of the population of a large nation gathers around language, reinforced by religion, as an expression of individuality. The struggle between the French-speaking Alpine Walloons and the Nordic Flemings of Low Dutch tongue in Belgium is an example of two competing languages in an artificial nation which was formed originally around religion. On the other hand, the Irish National movement centres chiefly around religion reinforced by myths of ancient grandeur. The French Canadians and the Poles use both religion and language to hold together what they consider a political unit. None of these so-called nationalities are founded on race.

During the past century side by side with the tendency to form imperial or large national groups, such as the Pan-Germanic, Pan-Slavic, Pan-Rumanian or Italia Irredenta movements, there has appeared a counter movement on the part of small distintegrating "nationalities" to reassert themselves, such as the Bohemian, Bulgarian, Serbian, Irish, and Egyptian national revivals. The upheaval is usually caused, as in the cases of the Irish and the Serbians, by delusions of former greatness now become national obsessions, but sometimes it means the resistance of a small group of higher culture to absorption by a lower civilization. The reassertion of these small nationalities is associated with the resurgence of the lower races at the expense of the Nordics.

Examples of a high type threatened by a lower culture are afforded by the Finlanders, who are trying to escape the dire fate of their neighbors across the Gulf of Finland—the Russification of the Germans and Swedes of the Baltic Provinces—and by the struggle of the Danes of Schleswig to escape

Germanization. The Armenians, too, have resisted stoutly the pressure of Islam to force them away from their ancient Christian faith. This people really represents the last outpost of Europe toward the Mohammedan East and constitutes the best remaining medium through which Western ideals and culture can be introduced into Asia.

In these as in other cases, the process of absorption from the viewpoint of the world at large is good or evil exactly in proportion to the relative value of the culture and race of the two groups. The world would be no richer in civilization with an independent Bohemia or an enlarged Rumania; but, on the contrary, an independent Hungarian nation strong enough to stand alone, a Finland self-governing or reunited to Sweden, or an enlarged Greece would add greatly to the forces that make for good government and progress. An independent Ireland worked out on a Tammany model is not a pleasing prospect. A free Poland, apart from its value as a buffer state, might be actually a step backward. Poland was once great, but the elements that made it so are scattered and gone and the Poland of to-day is a geographical expression and nothing more.

The prevailing lack of true race consciousness is probably due to the fact that every important nation in Europe as at present organized, with the sole exception of the Iberian and Scandinavian states, possesses in large proportions representatives of at least two of the fundamental European subspecies of man and of all manner of crosses between them. In France to-day, as in Cæsar's Gaul, the three races divide the nation in unequal proportions.

In the future, however, with an increased knowledge of the correct definition of true human races and types and with a recognition of the immutability of fundamental racial characters and of the results of mixed breeding, far more value will be attached to racial in contrast to national or linguistic affinities. In marital relations the consciousness of race will also play a much larger part than at present, although in the social sphere we shall have to contend with a certain strange attraction for contrasted types. When it becomes thoroughly understood that the children of mixed marriages between contrasted races belong to the lower type, the importance of transmitting in unimpaired purity the blood inheritance of ages will be appreciated at its full value and to bring half-breeds into the world will be regarded as a social and racial crime of the first magnitude. The laws against miscegenation must be greatly extended if the higher races are to be maintained.

The language that a man speaks may be nothing more than evidence that at some time in the past his race has been in contact, either as conqueror or as conquered, with its original possessors. Postulating the Nordic origin and dissemination of the Proto-Aryan language, then in Asia and elsewhere existing Aryan speech on the lips of populations showing no sign of Nordic characters is to be considered evidence of a former dominance of Nordics now long vanished.

One has only to consider the spread of the language of Rome over the vast extent of her Empire to realize how few of those who speak to-day Romance tongues derive any portion of their blood from the pure Latin stock and the error of talking about a "Latin race" becomes evident.

There is, however, such a thing as a large group of nations which have a mutual understanding and sympathy based on the possession of a common or closely related group of languages and on the culture of which it is the medium. This assemblage may be called the "Latin nations," but never the "Latin race."

"Latin America" is a still greater misnomer as the great mass of the populations of South and Central America is not even European and still less "Latin," being overwhelmingly of Amerindian blood.

In the Teutonic group a large majority of those who speak Teutonic languages, as the English, Flemings, Dutch, North Germans and Scandinavians, are descendants of the Nordic race while the dominant class in Europe is everywhere of that blood.

As to the so-called "Celtic race," the fantastic inapplicability of the term is at once apparent when we consider that those populations on the borders of the Atlantic Ocean, who to-day speak Celtic dialects, are divided into three groups, each one showing in great purity the characters of one of the three entirely distinct human subspecies found in Europe. To class together the Breton peasant with his round Alpine skull; the little, long-skulled, brunet Welshman of Mediterranean race, and the tall, blond, light-eyed Scottish Highlander of pure Nordic blood, in a single group labelled Celtic is obviously impossible. These peoples have neither physical, mental nor cultural characteristics in common. If one be of "Celtic" blood then the other two are clearly of different origin.

There was once a people who used the original Celtic language and they formed the western vanguard of the Nordic race. This people was spread all over central and western Europe prior to the irruption of the Teutonic tribes and were, no doubt, much mixed with Alpines among the lower classes. The descendants of these Celts must be sought to-day among those having the characters of the Nordic race and not elsewhere.

In England the short, dark Mediterranean Welshman talks about being "Celtic," quite unconscious that he is the residuum of Pre-Nordic races of immense antiquity. If the Celts are Mediterranean in race then they are absent from central Europe and we must regard as Celts all the Berbers and Egyptians, as well as many Persians and Hindus.

In France many anthropologists regard the Breton of Alpine blood in the same light and ignore his remote Asiatic origin. If these Alpine Bretons are Celts then there is no substantial trace of their blood, in the British Isles, as round skulls are practically absent there and all the blond elements in England, Scotland and Ireland must be attributed to the historic Teutonic invasions. Furthermore, we must call all the continental Alpines "Celts," and must also include all Slavs, Armenians and other brachycephs of western Asia within that designation, which would be obviously grotesque. The fact that the original Celts left their speech on the tongues of Mediterraneans in Wales and of Alpines in Brittany must not mislead us, as it indicates nothing more than that Celtic speech antedates the Anglo-Saxons in England and the Romans in France. We must once and for all time discard the name "Celt" for any existing race whatever and speak only of "Celtic" language and culture.

In Ireland the big, blond Nordic Danes claim the honor of the name of "Celt," if honor it be, but they are fully as Nordic as the English and the great mass of the Irish are of Danish, Norse and Anglo-Norman blood in addition to earlier and Pre-Nordic elements. We are all familiar with the blond and the brunet type of Irishman. These represent precisely the same racial elements as those which enter into the composition of the English, namely, the tall Nordic blond and the little Mediterranean brunet pure or combined with Paleolithic remnants. The Irish are consequently not entitled to independent national existence on the ground of race, but if there be any ground for political separation from England it must rest like that of Belgium on religion, a basis for political combinations now happily obsolete in communities well advanced in culture.

In the case of the so-called "Slavic race," there is much more unity between racial type and language. It is true that in most Slavic-speaking countries the predominant race is clearly Alpine, except perhaps in Russia where there is a very large substratum of Nordic type—which may be considered as Proto-Nordic. The objection which is made to the identification of the Slavic race with the Alpine type rests chiefly on the fact that a very large portion of the Alpine race is German-speaking in Germany, Italian-speaking in Italy and French-speaking in central France. Moreover, large portions of Rumania are of exactly the same racial complexion.

Many of the modern Greeks are also Alpines; in fact, are little more than Byzantinized Slavs. It was through the Byzantine Empire that the Slavs first came in contact with the Mediterranean world and through this Greek medium the Russians, the Serbians, the Rumanians and the Bulgarians received their Christianity.

Situated on the eastern marches of Europe, the Slavs were submerged during long periods in the Middle Ages by Mongolian hordes and were checked in development and warped in culture. Definite traces remain of the blood of the Mongols both in isolated and compact groups in south Russia and also scattered throughout the whole country as far west as the German boundary. The high tide of the Mongol invasion was during the thirteenth century. Three hundred years later the great Muscovite expansion began, first over the steppes to the Urals and then across Siberian tundras and forests to the waters of the Pacific, taking up in its course much Mongolian blood, especially during the early stages of its advance.

The term "Caucasian race" has ceased to have any meaning except where it is used, in the United States, to contrast white populations with Negroes or Indians or in the Old World with Mongols. It is, however, a convenient term to include the three European subspecies when considered as divisions of one of the primary branches or species of mankind but it is, at best, a cumbersome and archaic designation. The name "Caucasian" arose a century ago from a false assumption that the cradle of the blond Europeans was in the Caucasus where no traces are now found of any such race, except a small and decreasing minority of blond traits among the Ossetes, a tribe whose Aryan speech is related to that of the Armenians, and who while mainly brachycephalic still retain some blond and dolichocephalic elements which apparently are fading fast. The Ossetes now have about thirty per cent fair eyes and ten per cent fair hair. They are supposed to be to some extent a remnant of the Alans, the easternmost Teutonic tribe and closely related to the Goths. Both Alans and Goths very early in the Christian era occupied southern Russia, and were the latest known Nordics in the vicinity of the Caucasus Mountains. If these Ossetes are not partly of Alan origin they may possibly represent the last lingering trace of ancient Scythian dolichocephalic blondness.

The phrase "Indo-European or Indo-Germanic race" is also of little use. If it has any meaning at all it must include all the three European races as well as members of the Mediterranean race in Persia and India. The use of this name also involves a false assumption of blood relationship between the north European populations and the Hindus, because of their possession in common of Aryan speech.

The name "Aryan race" must also be frankly discarded as a term of racial significance. It is to-day purely linguistic, although there was at one time, of course, an identity between the original Proto-Aryan mother tongue and the race that first spoke and developed it. In short, there is not nor has there ever been either a Caucasian or an Indo-European race, but there was once, thousands of years ago, an original Aryan race long since vanished into dim memories of the past. If used in a racial sense other than as above, it should be limited to the Nordic invaders of Hindustan now long extinct. The great lapse of time since the disappearance of the ancient Aryan race as such is measured by the extreme disintegration of the various groups of Aryan languages. These linguistic divergences are chiefly due to the imposition by conquest of Aryan speech upon several distinct subspecies of man throughout western Asia and Europe.

It may be pertinent before leaving this subject to point out that, as a whole, "Germans," "French," and "English," as certain populations are now called, are but little more entitled to be considered the direct descendants, or even the exclusive modern representatives, of the ancient Germans, Franks or Anglo-Saxons, than are the living

Italians or Greeks to be regarded as the offspring of the Romans of the days of the Republic or the Hellenes of the classic period. There are, of course, many individuals and groups, perhaps even classes, in each of these nations, who do accurately represent the race from which the national name was derived. The Scandinavians, on the other hand, are racially what they were two thousand years ago, though diminished somewhat in race vigor by the loss through the emigration of some of their more enterprising members. Meanwhile, at the other end of Europe, the modern Spaniard probably more closely represents the Iberians before the arrival of the Gauls than did the Spaniard of five hundred years ago.

VI

RACE AND LANGUAGE

When a country is invaded and conquered by a race speaking a foreign language, one of several things may happen: replacement of both population and language, as in the case of eastern England when conquered by the Saxons or adoption of the language of the victors by the natives, as happened in Roman Gaul, where the invaders imposed their Latin tongue throughout the land without substantially altering the race.

The Romans probably modified the race in Gaul by killing a much larger proportion of the Nordic fighting classes than of the more submissive Alpines and Mediterraneans. This is confirmed by the fact that when the prolonged and brilliant resistance to Cæsar's legions was finally broken, no serious attempt was ever again made to throw off the Roman yoke and a few centuries later the Teutonic invaders encountered no determined opposition from the inhabitants when they entered and occupied the land.

In England and Scotland later conquerors, Norsemen, Danes and Normans, failed to change radically the Saxon speech of the country and in Gaul the

Teutonic tongues of the Franks, Burgundians and Northmen could not displace the language of Rome.

Autochthonous inhabitants frequently impose upon their invaders their own language and customs. In Normandy the conquering Norse pirates accepted the language, religion and customs of the natives and in a century they vanish from history as Scandinavian heathen and appear as the foremost representatives of the speech and religion of Rome.

In Hindustan the blond Nordic invaders forced their Aryan language on the aborigines, but their blood was quickly and utterly absorbed in the darker strains of the original owners of the land. A record of the desperate efforts of the conqueror classes in India to preserve the purity of their blood persists until this very day in their carefully regulated system of castes. In our Southern States Jim Crow cars and social discriminations have exactly the same purpose and justification.

The Hindu to-day speaks a very ancient form of Aryan language, but there remains not one recognizable trace of the blood of the white conquerors who poured in through the passes of the Northwest. The boast of the modern Indian that he is of the same race as his English ruler is entirely without basis in fact and the little swarthy native lives amid the monuments of a departed grandeur, professing the religion and speaking the tongue of his long forgotten Nordic conquerors, without the slightest claim to blood kinship. The dim and uncertain traces of Nordic blood in northern India only serve to emphasize the utter swamping of the white man in the burning South.

The power of racial resistance of a dense and thoroughly acclimated population to an incoming army is very great. No ethnic conquest can be complete unless the natives are exterminated and the invaders bring their own women with them. If the conquerors are obliged to depend upon the women of the vanquished to carry on the race, the intrusive blood strain of the invaders in a short time becomes diluted beyond recognition.

It sometimes happens that an infiltration of population takes place either in the guise of unwilling slaves or of willing immigrants, who fill up waste places and take to the lowly tasks which the lords of the land despise, thus gradually occupying the country and literally breeding out their masters.

The former catastrophe happened in the declining days of the Roman Republic and the south Italians of to-day are very largely descendants of the nondescript slaves of all races, chiefly from the southern and eastern coasts of the Mediterranean, who were imported by the Romans under the Empire to work their vast estates. The latter is occurring to-day in many parts of America, especially in New England.

The eastern half of Germany has a Slavic Alpine substratum which represents the descendants of the Wends, who first appear about the commencement of the Christian era and who by the sixth century had penetrated as far west as the Elbe, occupying the lands left vacant by the Teutonic tribes which had migrated southward. These Wends in turn were Teutonized by a return wave of military conquest from the tenth century onward, and to-day their descendants are considered Germans in good standing. Having adopted the German as their sole tongue they are now in religious, political and cultural sympathy with the pure Teutons; in fact, they are quite unconscious of any racial distinction.

This historic fact underlies the ferocious controversy which has been raised over the ethnic origin of the Prussians, the issue being whether the populations in Brandenburg, Silesia, Posen, West Prussia, and other districts in eastern Germany, are Alpine Wends or true Nordics. The truth is that the dominant half of the population is purely Teutonic and the remainder of the population are merely Teutonized Wends and Poles of Alpine affinities. Of course, these territories must also retain some of their early Teutonic population and the blood of the Goth, Burgund, Vandal and Lombard, who at the commencement of the Christian era were located there, as well as of the later Saxon element, must enter largely into the composition of the Prussian of to-day.

Some anthropologists regard the Teutonized round heads of south Germany as a distinct subdivision of the Alpines because of the large percentage of blond hair and still larger percentage of light colored eyes.

The most important communities in continental Europe of pure German type are to be found in old Saxony, the country around Hanover, and this element prevails generally in the northwestern part of the German Empire among the Low German-speaking population, while the High German-speaking population is largely composed of Teutonized Alpines.

The coasts of the North Sea extending from Schleswig and Holstein into Holland are inhabited by a very pure Nordic type known as the Frisians. They are the handsomest and in many respects the finest of the continental Nordics and are closely related to the English, as many of the Post-Roman invaders of England either came from Frisia or from adjoining districts.

All the states involved in the present world war have sent to the front their fighting Nordic element and the loss of life now going on in Europe will fall much more heavily on the blond giant than on the little brunet.

As in all wars since Roman times from a breeding point of view the little dark man is the final winner. No one who saw one of our regiments march on its way to the Spanish War could fail to be impressed with the size and blondness of the men in the ranks as contrasted with the complacent citizen, who from his safe stand on the gutter curb gave his applause to the fighting man and then stayed behind to perpetuate his own brunet type. In the present war one has merely to study the type of officer and of the man in the ranks to realize that, in spite of the draft net, the Nordic race is contributing an enormous majority of the fighting men, out of all proportion to their relative numbers in the nation at large.

This same Nordic element, everywhere the type of the sailor, the soldier, the adventurer and the pioneer, was ever the type to migrate to new countries, until the ease of transportation and the desire to escape military service in the last forty years reversed the immigrant tide. In consequence of this change our immigrants now largely represent lowly refugees from "persecution," and other social discards.

In most cases the blood of pioneers has been lost to their race. They did not take their women with them. They either died childless or left half-breeds behind them. The virile blood of the Spanish conquistadores, who are now little more than a memory in Central and South America, died out from these causes.

This was also true in the early days of our Western frontiersmen, who individually were a far finer type than the settlers who followed them. In fact, it is said that practically every one of the Forty-Niners in California was of Nordic type.

VII

THE EUROPEAN RACES IN COLONIES

For reasons already set forth there are few communities outside of Europe of pure European blood. The racial destiny of Mexico and of the islands and coasts of the Spanish Main is clear. The white man is being rapidly bred out by Negroes on the islands and by Indians on the mainland. It is quite evident that the West Indies, the coast region of our Gulf States, perhaps, also the black belt of the lower Mississippi Valley must be abandoned to Negroes. This transformation is already complete in Haiti and is going rapidly forward in Cuba and Jamaica. Mexico and the northern part of South America must also be given over to native Indians with an ever thinning veneer of white culture of the "Latin" type.

In Venezuela the pure whites number about one per cent of the whole population, the balance being Indians and various crosses between Indians, Negroes and whites. In Jamaica the whites number not more than two per cent, while the remainder are Negroes or mulattoes. In Mexico the proportion is larger, but the unmixed whites number less than twenty per cent of the whole, the others being Indians pure or mixed. These latter are the "greasers" of the American frontiersman.

Whenever the incentive to imitate the dominant race is removed the Negro or, for that matter, the Indian, reverts shortly to his ancestral grade of culture. In other words, it is the individual and not the race that is affected by religion, education and example. Negroes have demonstrated throughout recorded time that they are a stationary species and that they do not possess the potentiality of progress or initiative from within. Progress from self-impulse must not be confounded with mimicry or with progress imposed from without by social pressure or by the slaver's lash.

When the impulse of an inferior race to imitate or mimic the dress, manners or morals of the dominant race is destroyed by the acquisition of political or social independence, the servient race tends to revert to its original status as in Haiti.

Where two distinct species are located side by side history and biology teach that but one of two things can happen; either one race drives the other out, as the Americans exterminated the Indians and as the Negroes are now replacing the whites in various parts of the South; or else they amalgamate and form a population of race bastards in which the lower type ultimately preponderates. This is a disagreeable alternative with which to confront sentimentalists but nature is only concerned with results and neither makes nor takes excuses. The chief failing of the day with some of our well meaning philanthropists is their absolute refusal to face inevitable facts, if such facts appear cruel.

In the Argentine white blood of the various European races is pouring in so rapidly that a community preponderantly white, but of the Mediterranean race, may develop, but the type is suspiciously swarthy.

In Brazil, Negro blood together with that of the native inhabitants is rapidly overwhelming the white Europeans, although in the southern provinces German immigration has played an important rôle and the influx of Italians has also been considerable.

In Asia, with the sole exception of the Russian settlements in Siberia, there can be and will be no ethnic conquest and all the white men in India, the East Indies, the Philippines and China will leave not the slightest trace behind them in the blood of the native population. After several centuries of contact and settlement the pure Spanish in the Philippines are about half of one per cent. The Dutch in their East Indian islands are even less, while the resident whites in Hindustan amount to about one-tenth of one per cent. Such numbers are infinitesimal and of no force in a democracy, but in a monarchy, if kept free from contamination, they suffice for a ruling caste or a military aristocracy.

Throughout history it is only the race of the leaders that has counted and the most vigorous have been in control and will remain in mastery in one form or another until such time as democracy and its illegitimate offspring, socialism, definitely establish cacocracy and the rule of the worst and put an end to progress. The salvation of humanity will then lie in the chance survival of some sane barbarians who may retain the basic truth that inequality and not equality is the law of nature.

Australia and New Zealand, where the natives have been virtually exterminated by the whites, are developing into communities of pure Nordic blood and will for that reason play a large part in the future history of the Pacific. The bitter opposition of the Australians and Californians to the admission of Chinese coolies and Japanese farmers is due primarily to a blind but absolutely justified determination to keep those lands as white man's countries.

In Africa, south of the Sahara, the density of the native population will prevent the establishment of any purely white communities, except at the southern extremity of the continent and possibly on portions of the plateaux of eastern Africa. The stoppage of famines and wars and the abolition of the slave trade, while dictated by the noblest impulses of humanity, are suicidal to the white man. Upon the removal of these natural checks Negroes multiply so rapidly that there will not be standing room on the continent for white men, unless, perchance, the lethal sleeping sickness, which attacks the natives far more frequently than the whites, should run its course unchecked.

In South Africa a community of mixed Dutch and English extraction is developing. Here the only difference is one of language. English, being a world tongue, will inevitably prevail over the Dutch patois called "Taal." This Frisian dialect, as a matter of fact, is closer to old Saxon or rather Kentish than any living continental tongue and the blood of the North Hollander is extremely close to that of the Anglo-Saxon of England. The English and the Dutch will merge in a common type just as they have in the past two hundred years in the Colony and State of New York. They must stand together if they are to maintain any part of Africa as a white man's country, because they are confronted with the menace of an enormous black Bantu population which will drive out the whites unless the problem is bravely faced.

The only possible solution is to establish large colonies for the Negroes and to allow them outside of them only as laborers and not as settlers. There must be ultimately a black South Africa and a white South Africa side by side or else a pure black Africa from the Cape to the cataracts of the Nile.

In upper Canada, as in the United States up to the time of our Civil War, the white population was purely Nordic. The Dominion is, as a whole, handicapped by the presence of an indigestible mass of French-Canadians, largely from Brittany and of Alpine origin, although the habitant patois is an archaic Norman of the time of Louis XIV. These Frenchmen were granted freedom of language and religion by their conquerors and are now using those privileges to form separatist groups in antagonism to the English population. The Quebec Frenchmen will succeed in seriously impeding the progress of Canada and will succeed even better in keeping themselves a poor and ignorant community of little more importance to the world at large than are the Negroes in the South. The selfishness of the Quebec Frenchmen is measured by the fact that in the present war they will not fight for the British Empire or for France or even for clerical Belgium and they are now endeavoring to make use of the military crisis to secure a further extension of their "nationalistic ideals."

Personally the writer believes that the finest and purest type of a Nordic community outside of Europe will develop in northwest Canada and on the Pacific coast of the United States. Most of the other countries in which the Nordic race is now settling lie outside the special environment in which alone it can flourish.

The Negroes of the United States while stationary, were not a serious drag on civilization until in the last century they were given the rights of citizenship and were incorporated in the body politic. These Negroes brought with them no language or religion or customs of their own which persisted but adopted all these elements of environment from the dominant race, taking the names of their masters just as to-day the German and Polish Jews are assuming American names. They came for the most part from the coasts of the Bight of Benin, but some of the later ones came from the southeast coast of Africa by way of Zanzibar. They were of various black tribes but have been from the beginning saturated with white blood.

Looking at any group of Negroes in America, especially in the North, it is easy to see that while they are all essentially Negroes, whether coal-black, brown or yellow, a great many of them have varying amounts of Nordic blood in them, which has in some respects modified their physical structure without transforming them in any way into white men. This miscegenation was, of course, a frightful disgrace to the dominant race but its effect on the Nordics has been negligible, for the simple reason that it was confined to white men crossing with Negro women and did not involve the reverse process, which would, of course, have resulted in the infusion of Negro blood into the American stock.

The United States of America must be regarded racially as a European colony and owing to current ignorance of the physical bases of race, one often hears the statement made that native Americans of Colonial ancestry are of mixed ethnic origin.

This is not true.

At the time of the Revolutionary War the settlers in the thirteen Colonies were overwhelmingly Nordic, a very large majority being Anglo-Saxon in the most limited meaning of that term. The New England settlers in particular came from those counties of England where the blood was almost purely Saxon, Anglian, Norse and Dane. The date of their migration was earlier than the resurgence of the Mediterranean type that has so greatly expanded in England during the last century with the growth of manufacturing towns.

New England during Colonial times and long afterward was far more Nordic than old England; that is, it contained a smaller percentage of small, Pre-Nordic brunets. Any one familiar with the native New Englander knows the clean cut face, the high stature and the prevalence of gray and blue eyes and light brown hair and recognizes that the brunet element is less noticeable there than in the South.

The Southern States were populated also by Englishmen of the purest Nordic type but there is to-day, except among the mountains, an appreciably larger amount of brunet types than in the North. Virginia is in the same latitude as North Africa and south of this line no blonds have ever been able to survive in full vigor, chiefly because the actinic rays of the sun are the same regardless of other climatic conditions. These rays beat heavily on the Nordic race and disturb their nervous system, wherever the white man ventures too far from the cold and foggy North.

The remaining Colonial elements, the Holland Dutch and the Palatine Germans, who came over in small numbers to New York and Pennsylvania, were also largely Nordic, while many of the French Huguenots who escaped to America were drawn from the same racial element in France. The Scotch-Irish, who were numerous on the frontier of the middle Colonies were, of course, of pure Scotch and English blood, although they had resided in Ireland for two or three generations. They were quite free from admixture with the earlier Irish, from whom they were cut off socially by bitter religious antagonism and they are not to be considered as "Irish" in any sense.

There was no important immigration of other elements until the middle of the nineteenth century when Irish Catholic and German immigrants appear for the first time upon the scene.

The Nordic blood was kept pure in the Colonies because at that time among Protestant peoples there was a strong race feeling, as a result of which half-breeds between the white man and any native type were regarded as natives and not as white men.

There was plenty of mixture with the Negroes as the light color of many Negroes abundantly testifies, but these mulattoes, quadroons or octoroons were then and are now universally regarded as Negroes.

There was also abundant cross breeding along the frontiers between the white frontiersman and the Indian squaw but the half-breed was everywhere regarded as a member of the inferior race.

In the Catholic colonies, however, of New France and New Spain, if the half-breed were a good Catholic he was regarded as a Frenchman or a Spaniard, as the case might be. This fact alone gives the clew to many of our Colonial wars where the Indians, other than the Iroquois, were persuaded to join the French against the Americans by half-breeds who considered themselves Frenchmen. The Church of Rome has everywhere used its influence to break down racial distinctions. It disregards origins and only requires obedience to the mandates of the universal church. In that lies the secret of the opposition of Rome to all national movements. It maintains the imperial as contrasted with the nationalistic ideal and in that respect its inheritance is direct from the Empire.

Race consciousness in the Colonies and in the United States, down to and including the Mexican War, seems to have been very strongly developed among native Americans and it still remains in full vigor to-day in the South, where the presence of a large Negro population forces this question upon the daily attention of the whites.

In New England, however, whether through the decline of Calvinism or the growth of altruism, there appeared early in the last century a wave of sentimentalism, which at that time took up the cause of the Negro and in so doing apparently destroyed, to a large extent, pride and consciousness of race in the North. The agitation over slavery was inimical to the Nordic race, because it thrust aside all national opposition to the intrusion of hordes of immigrants of inferior racial value and prevented the fixing of a definite American type.

The Civil War was fought almost entirely by unalloyed native Americans. The Irish immigrants were, at the middle of the last century, confined to a few States and, being chiefly domestic servants or day laborers, were of no social importance. They gathered in the large cities and by voting as a solid block for their own collective benefit quickly demoralized the governments of the municipalities in which they secured ascendancy. The German immigrants who came to America about the same time were chiefly enthusiasts who had taken part in the German Revolution of '48. In spite of the handicap of a strange language they formed a more docile and educated element than the Irish and were more prone to scatter into the rural districts. Neither the Irish nor the Germans played an important part in the development or policies of the nation as a whole, although in the Civil War they each contributed a relatively large number of soldiers to the Northern army. These Irish and German elements were for the most part of the Nordic race and while they did not in the least strengthen the nation either morally or intellectually they did not impair its physique.

There has been little or no Indian blood taken into the veins of the native American, except in States like Oklahoma and in some isolated families scattered here and there in the Northwest. This particular mixture will play no very important role in future combinations of race on this continent, except in the north of Canada.

The native American has always found and finds now in the black men willing followers who ask only to obey and to further the ideals and wishes of the master race, without trying to inject into the body politic their own views, whether racial, religious or social. Negroes are never socialists or labor unionists and as long as the dominant imposes its will on the servient race and as long as they remain in the same relation to the whites as in the past, the Negroes will be a valuable element in the community but once raised to social equality their influence will be destructive to themselves and to the whites. If the purity of the two races is to be maintained they cannot continue to live side by side and this is a problem from which there can be no escape.

The native American by the middle of the nineteenth century was rapidly acquiring distinct characteristics. Derived from the Saxon and Danish parts of the British Isles and being almost purely Nordic he was by reason of a differential selection due to a new environment beginning to show physical peculiarities of his own slightly variant from those of his English forefathers and corresponding rather with the idealistic Elizabethan than with the materialistic Hanoverian Englishman. The Civil War, however, put a severe, perhaps fatal, check to the development and expansion of this splendid type by destroying great numbers of the best breeding stock on both sides and by breaking up the home ties of many more. If the war had not occurred these same men with their descendants would have populated the Western States instead of the racial nondescripts who are now flocking there.

There is every reason to believe that the native stock would have continued to maintain a high rate of increase if there had been no immigration of foreign laborers in the middle of the nineteenth century and that the actual population of the United States would be fully as large as it is now but would have been almost exclusively native American and Nordic.

The prosperity that followed the war attracted hordes of newcomers who were welcomed by the native Americans to operate factories, build railroads and fill up the waste spaces—"developing the country" it was called.

These new immigrants were no longer exclusively members of the Nordic race as were the earlier ones who came of their own impulse to improve their social conditions. The transportation lines advertised America as a land flowing with milk and honey and the European governments took the opportunity to unload upon careless, wealthy and hospitable America the sweepings of their jails and asylums. The result was that the new immigration, while it still included many strong elements from the north of Europe, contained a large and increasing number of the weak, the broken and the mentally crippled of all races drawn from the lowest stratum of the Mediterranean basin and the Balkans, together with hordes of the wretched, submerged populations of the Polish Ghettos. Our jails, insane asylums and almshouses are filled with this human flotsam and the whole tone of American life, social, moral and political has been lowered and vulgarized by them.

With a pathetic and fatuous belief in the efficacy of American institutions and environment to reverse or obliterate immemorial hereditary tendencies, these newcomers were welcomed and given a share in our land and prosperity. The American taxed himself to sanitate and educate these poor helots and as soon as they could speak English, encouraged them to enter into the political life, first of municipalities and then of the nation.

The native Americans are splendid raw material, but have as yet only an imperfectly developed national consciousness. They lack the instinct of self-preservation in a racial sense. Unless such an instinct develops their race will perish, as do all organisms which disregard this primary law of nature. Nature had granted to the Americans of a century ago the greatest opportunity in recorded history to produce in the isolation of a continent a powerful and racially homogeneous people and had provided for the experiment a pure race of one of the most gifted and vigorous stocks on earth, a stock free from the diseases, physical and moral, which have again and again sapped the vigor of the older lands. Our grandfathers threw away this opportunity in the blissful ignorance of national childhood and inexperience.

The result of unlimited immigration is showing plainly in the rapid decline in the birth rate of native Americans because the poorer classes of Colonial stock, where they still exist, will not bring children into the world to compete in the labor market with the Slovak, the Italian, the Syrian and the Jew. The native American is too proud to mix socially with them and is gradually withdrawing from the scene, abandoning to these aliens the land which he conquered and developed. The man of the old stock is being crowded out of many country districts by these foreigners just as he is to-day being literally driven off the streets of New York City by the swarms of Polish Jews. These immigrants adopt the language of the native American, they wear his clothes, they steal his name and they are beginning to take his women, but they seldom adopt his religion or understand his ideals and while he is being elbowed out of his own home the American looks calmly abroad and urges on others the suicidal ethics which are exterminating his own race.

When the test of actual battle comes, it will, of course, be the native American who will do the fighting and suffer the losses. With him will stand the immigrants of Nordic blood, but there will be numbers of these foreigners in the large cities who will prove to be physically unfit for military duty.

As to what the future mixture will be it is evident that in large sections of the country the native American will entirely disappear. He will not intermarry with inferior races and he cannot compete in the sweat shop and in the street trench with the newcomers. Large cities from the days of Rome, Alexandria, and Byzantium have always been gathering points of diverse races, but New York is becoming a *cloaca gentium* which will produce many amazing racial hybrids and some ethnic horrors that will be beyond the powers of future anthropologists to unravel.

One thing is certain: in any such mixture, the surviving traits will be determined by competition between the lowest and most primitive elements and the specialized traits of Nordic man; his stature, his light colored eyes, his fair skin and light colored hair, his straight nose and his splendid fighting and moral qualities, will have little part in the resultant mixture.

The "survival of the fittest" means the survival of the type best adapted to existing conditions of environment, which to-day are the tenement and factory, as in Colonial times they were the clearing of forests, fighting Indians, farming the fields and sailing the Seven Seas. From the point of view of race it were better described as the "survival of the unfit."

This review of the colonies of Europe would be discouraging were it not for the fact that thus far little attention has been paid to the suitability of a new country for the particular colonists who migrate there. The process of sending out colonists is as old as mankind itself and probably in the last analysis most of the chief races of the world, certainly most of the inhabitants of Europe, represent the descendants of successful colonists.

Success in colonization depends on the selection of new lands and climatic conditions in harmony with the immemorial requirements of the incoming race. The adjustment of each race to its own peculiar habitat is based on thousands of years of rigid selection which cannot be safely ignored. A certain isolation and freedom from competition with other races, for some centuries at least, is also important, so that the colonists may become habituated to their new surroundings.

The Americans have not been on the continent long enough to acquire this adjustment and consequently do not present as effective a resistance to competition with immigrants as did, let us say, the Italians when overrun by northern barbarians. As soon as a group of men migrate to new surroundings, climatic, social or industrial, a new form of selection arises and those not fitted to the new conditions die off at a greater rate than in their original home. This form of differential selection plays a large part in modern industrial centres and in large cities, where unsanitary conditions bear more heavily on the children of Nordics than on those of Alpines or Mediterraneans.

PART II

EUROPEAN RACES IN HISTORY

I

EOLITHIC MAN

Before considering the living populations of Europe we must give consideration to the extinct peoples that preceded them.

The science of anthropology is very recent—in its present form less than fifty years old—but it has already revolutionized our knowledge of the past and extended prehistory so that it is now measured not by thousands but by tens of thousands of years.

The history of man prior to the period of metals has been divided into ten or more subdivisions, many of them longer than the time covered by written records. Man has struggled up through the ages, to revert again and again into savagery and barbarism but apparently retaining each time something gained by the travail of his ancestors.

So long as there is in the world a freely breeding stock or race that has in it an inherent capacity for development and growth, mankind will continue to ascend until, possibly through the selection and regulation of breeding as intelligently applied as in the case of domestic animals, it will control its own destiny and attain moral heights as yet unimagined.

The impulse upward, however, is supplied by a very small number of nations and by a very small proportion of the population in such nations. The section of any community that produces leaders or genius of any sort is only a minute percentage. To utilize and adapt to human needs the forces and the raw materials of nature, to invent new processes, to establish new principles, and to elucidate and unravel the laws that control the universe call for genius. To imitate or to adopt what others have invented is not genius but mimicry.

This something which we call "genius" is not a matter of family, but of stock or strain, and is inherited in precisely the same manner as are the purely physical characters. It may be latent through several generations of obscurity and then flare up when the opportunity comes. Of this we have many examples in America. This is what education or opportunity does for a community; it permits in these rare cases fair play for development, but it is race, always race, that produces genius. An individual of inferior type or race may profit greatly by good environment. On the other hand, a member of a superior race in bad surroundings may, and very often does, sink to an extremely low level. While emphasizing the importance of race, it must not be forgotten that environment, while it does not alter the potential capacity of the stock, can perform miracles in the development of the individual

This genius producing type is slow breeding and there is real danger of its loss to mankind. Some idea of the value of these small strains can be gained from the recent statistics which demonstrate that Massachusetts produces more than fifty times as much genius per hundred thousand whites as does Georgia, Alabama or Mississippi, although apparently the race, religion and environment, other than climatic conditions, are much the same, except for the numbing presence in the South of a large stationary Negro population.

The more thorough the study of European prehistory becomes, the more we realize how many advances of culture have been made and then lost. Our parents were accustomed to regard the overthrow of ancient civilization in the Dark Ages as the greatest catastrophe of mankind, but we now know that the classic period of Greece was preceded by similar dark ages caused by the Dorian invasions, that had overthrown the Homeric-Mycenæan culture, which in its turn had flourished after the destruction of its parent, the brilliant Minoan culture of Crete. Still earlier, some twelve thousand years ago, the Azilian Period of poverty and retrogression succeeded the wonderful achievements of the hunter-artists of the Upper Paleolithic.

The progress of civilization becomes evident only when immense periods are studied and compared, but the lesson is always the same, namely, that race is everything. Without race there can be nothing except the slave wearing his master's clothes, stealing his master's proud name, adopting his master's tongue and living in the crumbling ruins of his master's palace. Everywhere on the sites of ancient civilizations the Turk, the Kurd and the Bedouin camp; and Americans may well pause and consider the fate of this country which they, and they alone, founded and nourished with their blood. The immigrant ditch diggers and the railroad navvies were to our fathers what their slaves were to the Romans and the same transfer of political power from master to servant is taking place to-day.

Man's place of origin was undoubtedly Asia. Europe is only a peninsula of the Eurasiatic continent and although the extent of its land area during the Pleistocene was much greater than at present, it is certain from the distribution of the various species of man, that the main races evolved in Asia, probably north of the great Himalayan range long before the centre of that continent was reduced to a series of deserts by progressive desiccation.

The evidence based on man's relatively large bulk, on the lack of the development of his fore limbs and particularly on his highly specialized foot structure all indicate that he has not been arboreal for a vast period of time, probably not since the end of the Miocene. The change of habitat from the trees to the ground may have been caused by a profound modification of climate, from moist to dry or from warm to cold, which in turn may have affected the food supply and compelled a more carnivorous diet.

Evidence of the location of the early evolution of man in Asia and in the geologically recent submerged area toward the southeast is afforded by the fossil deposits in the Siwalik hills of northern India; where the remains of primates have been found which were either ancestral or closely related to the four genera of living anthropoids and where we may confidently look for remains of the earliest human forms; and by the discovery in Java, which in Pliocene times was connected with the mainland over what is now the South China Sea, of the earliest known form of erect primate, the *Pithecanthropus*. This apelike man is practically the "missing link," being intermediate between man and the anthropoids and is generally believed to have been contemporary with the Günz glaciation of some 500,000 years ago, the first of the four great glacial advances in Europe.

One or two species of anthropoid apes have been discovered in the Miocene of Europe which may possibly have been remotely related to the ancestors of man but when the archæological exploration of Asia shall be as complete and intensive as that of Europe it is probable that more forms of fossil anthropoids and new species of man will be found there.

Man existed in Europe during the second and third interglacial periods, if not earlier. We have his artifacts in the form of eoliths, at least as early as the second interglacial stage, the Mindel-Riss, of some 300,000 years ago. A single jaw found near Heidelberg is referred to this period and is the earliest skeletal evidence of man in Europe. From certain remarkable characters in this jaw, it has been assigned to a new species, *Homo heidelbergensis.*

Then follows a long period showing only scanty industrial relics and no known skeletal remains. Man was slowly and painfully struggling up from a culture phase where chance flints served his temporary purpose. This period, known as the Eolithic, was succeeded by a stage of human development where slight chipping and retouching of flints for his increasing needs led, after vast intervals of time, to the deliberate manufacture of tools. This Eolithic Period is necessarily extremely hazy and uncertain. Whether or not certain chipped or broken flints, called eoliths or dawn stones, were actually human artifacts or were the products of natural forces is, however, immaterial for man must have passed through such an eolithic stage.

The further back we go toward the commencement of this Eolithic culture, the more unrecognizable the flints necessarily become until they finally cannot be distinguished from natural stone fragments. At the beginning, the earliest man merely picked up a convenient stone, used it once and flung it away, precisely as an anthropoid ape would act to-day if he wanted to break the shell of a tortoise or crack an ostrich egg.

Man must have experienced the following phases of development in the transition from the prehuman to the human stage: first, the utilization of chance stones and sticks; second, the casual adaptation of flints by a minimum amount of chipping; third, the deliberate manufacture of the simplest implements from flint nodules; and fourth, the invention of new forms of weapons and tools in ever increasing variety.

Of the last two stages we have an extensive and clear record. Of the second stage we have in the eoliths intermediate forms ranging from flints that are evidently results of natural causes to flints that are clearly artifacts. The first and earliest stage, of course, could leave behind it no definite record and must in the present state of our knowledge rest on hypothesis.

II

PALEOLITHIC MAN

With the deliberate manufacture of implements from flint nodules, we enter the beginning of Paleolithic time and from here on our way is relatively clear. The successive stages of the Paleolithic were of great length but are each characterized by some improvement in the manufacture of tools. During long ages man was merely a tool making and tool using animal and, after all is said, that is about as good a definition as we can find to-day for the primate we call human.

The Paleolithic Period or Old Stone Age lasted from the somewhat indefinite termination of the Eolithic, some 150,000 years ago, to the Neolithic or New Stone Age, which began about 7000 B. C.

The Paleolithic falls naturally into three great subdivisions. The Lower Paleolithic includes the whole of the last interglacial stage with the subdivisions of the Pre-Chellean, Chellean and Acheulean; the Middle Paleolithic covers the whole of the last glaciation and is co-extensive with the Mousterian Period and the dominance of the Neanderthal species of man.* The Upper Paleolithic embraces all the postglacial stages down to the Neolithic and includes the subdivisions of the Aurignacian, Solutrean, Magdalenian and Azilian. During the entire Upper Paleolithic, except the short closing phase, the Cro-Magnon race flourished.

It is not until after the third severe period of great cold, known as the Riss glaciation, nor until we enter, some 150,000 years ago, the third and last interglacial stage of temperate climate, known as the Riss-Würm, that we find a definite and ascending series of culture. The Pre-Chellean, Chellean and Acheulean divisions of the Lower Paleolithic occupied the whole of this warm or rather temperate interglacial phase, which lasted nearly 100,000 years.

A shattered skull, a jaw and some teeth have been discovered recently in Sussex, England. These remains were attributed to the same individual, who was named the Piltdown Man. Owing to the extraordinary thickness of the skull and the simian character of the jaw, a new genus, *Eoanthropus*, the "dawn man," was created and assigned to Pre-Chellean times. Some of the tentative restorations of the fragmentary bones make this skull altogether too modern and too capacious for a Pre-Chellean or even a Chellean.

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* The Middle Paleolithic Period is suggested here for the first time. —Editor's Note.

Further study and comparison with the jaws of other primates also indicate that the jaw belonged to a chimpanzee so that the genus *Eoanthropus* must now be abandoned and the Piltdown Man must be included in the genus *Homo* as at present constituted.

In any event the Piltdown Man is highly aberrant and, so far as our present knowledge goes, does not appear to be related to any other species of man found during the Lower Paleolithic. Future discoveries of the Piltdown type and for that matter of Heidelberg Man may, however, raise either or both of them to generic rank.

In later Acheulean times a new human species, very likely descended from the early Heidelberg Man of Eolithic times, appears on the scene and is known as the Neanderthal race. Many fossil remains of this type have been found.

The Neanderthaloids occupied the European stage exclusively, with the possible exception of the Piltdown Man, from the first appearance of man in Europe to the end of the Middle Paleolithic. The Neanderthals flourished throughout the entire duration of the last glacial advance known as the Würm glaciation. This period, known as the Mousterian, began about 50,000 years ago and lasted some 25,000 years.

The Neanderthal species disappears suddenly and completely with the advent of postglacial times, when, about 25,000 years ago, it was apparently supplanted or exterminated by a new and far higher race, the famous Cro-Magnons.

There may well have been during Mousterian times races of man in Europe other than the Neanderthaloids, but of them we have no record. Among the numerous remains of Neanderthals, however, we do find traces of distinct types showing that this race in Europe was undergoing evolution and was developing marked variations in characters.

Neanderthal Man was an almost purely meat eating hunter, living in caves or rather in their entrances. He was dolichocephalic and not unlike existing Australoids, although not necessarily of black skin and was, of course, in no sense a Negro. The skull was characterized by heavy superorbital ridges, a low and receding forehead, protruding and chinless under jaw and the posture was imperfectly erect. This race was widely spread and rather numerous. Some of its blood may have trickled down to the present time and occasionally one sees a skull apparently of the Neanderthal type. The best skull of this type ever seen by the writer belonged to a very intellectual professor in London, who was quite unconscious of his value as a museum specimen. In the old black breed of Scotland the overhanging brows and deep-set eyes are suggestive of this race.

Along with other ancient and primitive racial remnants, ferocious gorilla-like living specimens of Paleolithic man are found not infrequently on the west coast of Ireland and are easily recognized by the great upper lip, bridgeless nose, beetling brow with low growing hair and wild and savage aspect. The proportions of the skull which give rise to this large upper lip, the low forehead and the superorbital ridges are certainly Neanderthal characters. The other traits of this Irish type are common to many primitive races. This is the Irishman of caricature and the type was very frequent in America when the first Irish immigrants came in 1846 and the following years. It seems, however, to have almost disappeared in this country. If, as it is claimed, the Neanderthals have left no trace of their blood in living populations, these Firbolgs are derived from some very ancient and primitive race as yet undescribed.

In the Upper Paleolithic, which began after the close of the fourth and last glaciation, about 25,000 years ago, the Neanderthal race was succeeded by men of very modern aspect, known as Cro-Magnons. The date of the beginning of the Upper Paleolithic is the first we can fix with accuracy and its correctness can be relied on within narrow limits. The Cro-Magnon race first appears in the Aurignacian subdivision of the Upper Paleolithic. Like the Neanderthals, they were dolichocephalic but with a cranial capacity superior to the average in existing European populations and a stature of very remarkable size.

It is quite astonishing to find that the predominant race in Europe 25,000 years ago, or more, was not only much taller, but had an absolute cranial capacity in excess of the average of the present population. The low cranial average of existing populations in Europe can be best explained by the presence of large numbers of individuals of inferior mentality. These defectives have been carefully preserved by modern charity, whereas in the savage state of society the backward members were allowed to perish and the race was carried on by the vigorous and not by the weaklings.

The high brain capacity of the Cro-Magnons is paralleled by that of the ancient Greeks, who in a single century gave to the world out of their small population much more genius than all the other races of mankind have since succeeded in producing in a similar length of time. Attica between 530 and 430 B. C. had an average population of about 90,000 freemen, and yet from this number were born no less than fourteen geniuses of the very highest rank. This would indicate a general intellectual status as much above that of the Anglo-Saxons as the latter are above the Negroes. The existence at these early dates of a very high cranial capacity and its later decline shows that there is no upward tendency inherent in mankind of sufficient strength to overcome obstacles placed in its way by stupid social customs.

All historians are familiar with the phenomenon of a rise and decline in civilization such as has occurred time and again in the history of the world but we have here in the disappearance of the Cro-Magnon race the earliest example of the replacement of a very superior race by an inferior one. There is great danger of a similar replacement of a higher by a lower type here in America unless the native American uses his superior intelligence to protect himself and his children from competition with intrusive peoples drained from the lowest races of eastern Europe and western Asia.

While the skull of the Cro-Magnon was long, the cheek bones were very broad and this combination of broad face with long skull constitutes a peculiar disharmonic type which occurs to-day only among the very highly specialized Esquimaux and one or two other unimportant groups.

Skulls of this particular type, however, are found in small numbers among existing populations in central France, precisely in the district where the fossil remains of this race were first discovered. These isolated Frenchmen probably represent the last lingering remnant of this splendid race of hunting savages.

The Cro-Magnon culture is found around the basin of the Mediterranean, and this fact, together with the conspicuous absence in eastern Europe of its earliest phases, the lower Aurignacian, indicates that it entered Europe by way of north Africa, as its successors, the Mediterranean race, probably did in Neolithic times. There is little doubt that the Cro-Magnons originally developed in Asia and were in their highest stage of physical development at the time of their first appearance in Europe. Whatever change took place in their stature during their residence there seems to have been in the nature of a decline rather than of a further development.

There is nothing whatever of the Negroid in the Cro-Magnons and they are not in any way related to the Neanderthals, who represent a distinct and, save for the suggestions made above, an extinct species of man.

The Cro-Magnon race persisted through the entire Upper Paleolithic, during the periods known as the Aurignacian, Solutrean and Magdalenian, from 25,000 to 10,000 B. C. While it is possible that the blood of this race enters somewhat into the composition of the peoples of western Europe, its influence cannot be great and the Cro-Magnons—the Nordics of their day—disappear from view with the advent of the warmer climate of recent times.

It has been suggested that, following the fading ice edge north and eastward through Asia into North America, they became the ancestors of the Esquimaux but certain anatomical objections are fatal to this interesting theory. No one, however, who is familiar with the culture of the Esquimaux and especially with their wonderful skill in bone and ivory carving, can fail to be struck with the similarity of their technique to that of the Cro-Magnons.

To the Cro-Magnon race the world owes the birth of art. Caverns and shelters are constantly unearthed in France and Spain, where the walls and ceilings are covered with polychrome paintings or with incised bas-reliefs of animals of the chase. A few clay models, sometimes of the human form, are also found, together with abundant remains of their chipped but unpolished stone weapons and tools. Certain facts stand out clearly, namely, that they were purely hunters and clothed themselves in furs and skins. They knew nothing of agriculture or of domestic animals, even the dog being probably as yet untamed and the horse regarded merely as an object of chase.

The question of their knowledge of the principle of the bow and arrow during the Aurignacian and Solutrean is an open one but there are definite indications of the use of the arrow, or at least the barbed dart, in early Magdalenian times and this weapon was well known in the succeeding Azilian Period.

The presence toward the end of this last period of quantities of very small flints called microliths has given rise to much controversy. It is possible that some of these microliths represent the tips of small poisoned arrows such as are now in very general use among primitive hunting tribes the world over. Certain grooves in some of the flint weapons of the Upper Paleolithic may also have been used for the reception of poison. It is highly probable that the immediate predecessors of the Azilians, the Cro-Magnons, perhaps the greatest hunters that ever lived, not only used poisoned darts but were adepts in trapping game by means of pitfalls and snares, precisely as do some of the hunting tribes of Africa to-day. Barbed arrowheads of flint or bone, such as were commonly used by the North American Indians, have not been found in Paleolithic deposits.

In the Solutrean Period the Cro-Magnons shared Europe with a new race known as the Brünn-Předmost, found in central Europe. This race is characterized by a long face as well as a long skull, and was, therefore, harmonic. This Brünn-Předmost race appears to have been well settled in the Danubian and Hungarian plains and this location indicates an eastern rather than a southern origin.

Good anatomists have seen in this race the last lingering traces of the Neanderthaloids but it is more probable that we have here the first advance wave of the primitive forerunners of one of the modern European dolichocephalic races.

This new race was not artistic, but had great skill in fashioning weapons and possibly is associated with the peculiarities of Solutrean culture and the decline of art which characterizes that period. The artistic impulse of the Cro-Magnons which flourished so vigorously during the Aurignacian seems to be quite suspended during this Solutrean Period, but reappears in the succeeding Magdalenian times. This Magdalenian art is clearly the direct descendant of Aurignacian models and in this closing age of the Cro-Magnons all forms of Paleolithic art, carving, engraving, painting and the manufacture of weapons, reach their highest and final culmination.

Nine or ten thousand years may be assigned to the Aurignacian and Solutrean Periods and we may with considerable certainty give the minimum date of 16,000 B. C. as the beginning of Magdalenian time. Its entire duration can be safely set down at 6,000 years, thus bringing the final termination of the Magdalenian to 10,000 B. C. All these dates are extremely conservative and the error, if any, is in assigning too late and not too early a period to the end of Magdalenian times.

At the close of the Magdalenian we enter upon the last period of Paleolithic times, the Azilian, which lasted from about 10,000 to 7,000 B. C., when the Upper Paleolithic, the age of chipped flints, definitely and finally ends in Europe. This period takes its name from the Mas d'Azil, or "House of Refuge," a huge cavern in the eastern Pyrenees where the local Protestants took shelter during the persecutions. The extensive deposits in this cave are typical of the Azilian epoch and here certain marked pebbles may be the earliest known traces of symbolic writing, but true writing was probably not developed until the late Neolithic.

With the advent of this Azilian Period art entirely disappears and the splendid physical type of the Cro-Magnons is succeeded by what appear to have been degraded savages, who had lost the force and vigor necessary for the strenuous chase of large game and had turned to the easier life of fishermen.

In the Azilian the bow and arrow are in common use in Spain and it is well within the possibilities that the introduction and development of this new weapon from the South may have played its part in the destruction of the Cro-Magnons; otherwise it is hard to account for the disappearance of this race of large stature and great brain power.

The Azilian, also called the Tardenoisian in the north of France, was evidently a period of racial disturbance and at its close the beginnings of the existing races are found.

From the first appearance of man in Europe and for many tens of thousands of years down to some ten or twelve thousand years ago all known human remains are of dolichocephalic type.

In the Azilian Period appears the first round skull race. It comes clearly from the East. Later we shall find that this invasion of the forerunners of the existing Alpine race came from southwestern Asia by way of the Iranian plateau, Asia Minor, the Balkans and the valley of the Danube, and spread over nearly all of Europe. The earlier round skull invasions may as well have been infiltrations as armed conquests since apparently from that day to this the round skulls have occupied the poorer mountain districts and have seldom ventured down to the rich and fertile plains.

This new brachycephalic race is known as the Furfooz or Grenelle race, so called from the localities in Belgium and France where it was first discovered. Members of this round skull race have also been found at Ofnet in Bavaria where they occur in association with a dolichocephalic race, our first historic evidence of the mixture of contrasted races. The descendants of this Furfooz-Grenelle race and of the succeeding waves of invaders of the same brachycephalic type now occupy central Europe as Alpines and form the predominant peasant type in central and eastern Europe.

In this same Azilian Period there appear, coming this time from the South, the first forerunners of the Mediterranean race. The descendants of this earliest wave of Mediterraneans and their later reinforcements occupy all the coast and islands of the Mediterranean and are spread widely over western Europe. They can everywhere be identified by their short stature, slight build, long skull and brunet hair and eyes.

While during this Azilian-Tardenoisian Period these ancestors of two of the existing European races are appearing in central and southern Europe, a new culture phase, also distinctly Pre-Neolithic, was developing along the shores of the Baltic. It is known as Maglemose from its type locality in Denmark. It is believed to be the work of the first wave of the Nordic race which had followed the retreating glaciers northward over the old land connections between Denmark and Sweden to occupy the Scandinavian Peninsula. In the remains of this culture we find definite evidence of the domesticated dog.

With the appearance of the Mediterranean race the Azilian-Tardenoisian draws to its close and with it the entire Paleolithic Period. It is safe to assign for the end of the Paleolithic and the beginning of the Neolithic or Polished Stone Age, the date of 7,000 or 8,000 B. C.

The races of the Paleolithic Period, so far as we can judge from their remains, appear successively on the scene with all their characters fully developed. The evolution of all these subspecies and races took place somewhere in Asia or eastern Europe. None of these races appear to be ancestral one to another, although the scanty remains of the Heidelberg Man would indicate that he may have given rise to the later Neanderthals. Other than this possible affinity, the various races of Paleolithic times are not related one to another.

III

THE NEOLITHIC AND BRONZE AGES

About 7,000 B. C. we enter an entirely new period in the history of man, the Neolithic or New Stone Age, when the flint implements were polished and not merely chipped. Early as is this date in European culture, we are not far from the beginnings of an elaborate civilization in parts of Asia and Egypt. The earliest organized governments, so far as our present knowledge goes, were Egypt and Sumer. Chinese civilization at the other end of Asia is later, but mystery still shrouds its origin and its connection, if any, with the Mesopotamian city-states. The solution probably lies in the central region of the Syr Darya and future excavations in those regions may uncover very early cultures. Balkh, the ancient Bactra, the mother of cities, is located where the trade routes between China, India and Mesopotamia converged and it is in this neighborhood that careful and thorough excavations will probably find their greatest reward.

However, we are not dealing with Asia but with Europe only and our knowledge is confined to the fact that the various cultural advances at the end of the Paleolithic and the beginning of the Neolithic correspond with the arrival of new races.

The transition from the Paleolithic to the Neolithic was formerly considered as revolutionary, an abrupt change of both race and culture, but a period more or less transitory, known as the Campignian, now appears to bridge over this gap. This is only what should be expected, since in human archæology as in geology the more detailed our knowledge becomes the more gradually we find one period or horizon merges into its successor.

For a long time after the opening of the Neolithic the old-fashioned chipped weapons and implements remain the predominant type and the polished flints so characteristic of the Neolithic appear at first only sporadically, then increase in number until finally they entirely replace the rougher designs of the preceding Old Stone Age.

So in their turn these Neolithic polished stone implements, which ultimately became both varied and effective as weapons and tools, continued in use long after metallurgy developed. In the Bronze Period metal armor and weapons were for ages of the greatest value. So they were necessarily in the possession of the military and ruling classes only, while the unfortunate serf or common soldier who followed his master to war did the best he could with leather shield and stone weapons. In the ring that clustered around Harold for the last stand on Senlac Hill many of the English thanes died with their Saxon king, armed solely with the stone battle-axes of their ancestors.

In Italy also there was a long period known to the Italian archæologists as the Eneolithic Period when good flint tools existed side by side with very poor copper and bronze implements; so that, while the Neolithic lasted in western Europe four or five thousand years, it is, at its commencement, without clear definition from the preceding Paleolithic and at its end it merges gradually into the succeeding ages of metals.

After the opening Campignian phase there followed a long period typical of the Neolithic, known as the Robenhausian or Age of the Swiss Lake Dwellers, which reached its height after 5000 B. C. The lake dwellings seem to have been the work chiefly of the round skull Alpine races and are found in numbers throughout the region of the Alps and their foothills and along the valley of the Danube.

These Robenhausian pile built villages were the earliest known form of fixed habitation in Europe and the culture found in association with them was a great advance over that of the preceding Paleolithic. This type of permanent habitation flourished through the entire Upper Neolithic and the succeeding Bronze Age. Pile villages end in Switzerland with the first appearance of iron but elsewhere, as on the upper Danube, they still existed in the days of Herodotus.

Pottery is found together with domesticated animals and agriculture, which appear during the Robenhausian for the first time. The chase, supplemented by trapping and fishing, was still common but it probably was more for clothing than for food. A permanent site is not alone the basis of an agricultural community, but it also involves at least a partial abandonment of the chase, because only nomads can follow the game in its seasonal migrations and hunted animals soon leave the neighborhood of settlements.

The Terramara Period of northern Italy was a later phase of culture contemporaneous with the Upper Robenhausian and was typical of the Bronze Age. During the Terramara Period fortified and moated stations in swamps or close to the banks of rivers became the favorite resorts instead of pile villages built in lakes. The first traces of copper are found during this period. The earliest human remains in the Terramara deposits are long skulled, but round skulls soon appear in association with bronze implements. This indicates an original population of Mediterranean affinities overwhelmed later by Alpines.

Neolithic culture also flourished in the north of Europe and particularly in Scandinavia now free from ice. The coasts of the Baltic were appar-

CLASSIFICATION OF THE RACES OF EUROPE

THEIR CHARACTERS AND DISTRIBUTION

European Races	Modern Peoples	Ancient Peoples	Skull Cephalic Index	Face	Nose	Stature	Hair Color	Eye Color	Language
Nordic. Homo sapiens nordicus, Homo sapiens europeus, Baltic, Indo-Germanic, Indo-European, Scandinavian, Teutonic, Germanic, Dolicho-lepto, Reihengräber, Finnic.	All Norse, Swedes, Danes, Letts, many Finlanders, many Russians and Poles, North Germans, many French, Dutch, Flemings, English, Scotch, most Irish, Native Americans, Canadians, Australians, Africanders.	Sacæ, Massagetæ, Scythians, Cimmerians, Persians, Phrygians, Achæans, Dorians, Thracians, Umbrians, Oscans, Gauls, Galatians, Cymry, Belgæ, many Romans, Goths, Lombards, Vandals, Burgunds, Franks, Danes, Saxons, Angles, Norse, Normans, Varangians. Reihengräber. Kurgans. Maglemose culture.	Long. 79 and less.	High. Narrow. Long.	Narrow. Straight. Aquiline.	Tall.	Flaxen. Fair. Red. Light brown to chestnut. Never black.	Blue. Gray. Green. Light brown or hazel.	All Aryan except Tchouds, Esths, many Finlanders, and a few tribes in Siberia.
Alpine. Homo sapiens alpinus (Eurasiatic), Celto-Slav or Kelts of the French, Sarmatian, Arvernian, Auvergnat, Slavic, Savoyard, Lappanoid, Armenoid.	Bretons, Walloons, Central French, some Basques, Savoyards, Swiss, Tyrolese, most South Germans, North Italians, German-Austrians, Bohemians, Slovaks, Magyars, many Poles, most Russians, Serbs, Bulgars, most Rumanians, most Greeks, Turks, Armenians, most Persans and Afghans.	Sumerians, Hittites, Medes, Khosars, Sarmatians, Wends, Sorbs. Furfooz-Grenelle race, Swiss Lake Dwellers, Gizeh skulls. Robenhausen. Round Barrows. Bronze culture.	Round. 80 and over.	Broad.	Variable. Rather broad. Coarse.	Medium. Stocky. Heavy.	Dark brown. Black.	Black or dark brown. Often hazel or gray, in western Europe.	In Europe all Aryan except Magyars, some Basques, and some Finlanders. In Asia mostly Aryan, except Turcomans, Kirghizes, and other nomad tribes.
Mediterranean. Homo sapiens mediterraneus (Eurafrican), Iberian, Ligurian, Atlanto-Mediterranean.	Many English, Portuguese, Spaniards, some Basques, Provençals, South Italians, Sicilians, many Greeks and Rumanians, Moors, Berbers, Egyptians, many Persians and Afghans, Hindus.	Egyptians, many Babylonians, Pelasgians, Etruscans, Ligurians, Phœnicians, most Greeks, many Romans, Cretans, Iberians. Long Barrows. Neolithic culture. Megalithic monuments.	Long. 79 and less.	High. Narrow. Long.	Rather broad.	Short. Slender.	Dark brown. Black.	Black. Dark brown.	In Europe all Aryan, except some Basques. In Africa all Non-Aryan. In Asia nearly all Aryan.
Upper Paleolithic. *Extinct races.* Furfooz-Grenelle.		Proto-Alpines.	Round, 79–85.	Medium.			Probably very dark.	Probably very dark.	Probably non-Aryan.
Brünn Předmost.			Long, 66–68.	Low and medium.					
Homo sapiens cromagnonensis.	A few Dordognois.	Cro-Magnons.	Long, with disharmonic broad face, 63–76.	Low and broad.	Narrow and aquiline.	Very tall and medium.	Probably very dark.	Probably very dark.	Probably non-Aryan.
Middle Paleolithic. Homo neanderthalensis, Homo primigenius.	Doubtful traces among west Irish and among the old black breed of Scotland and Wales.	Neanderthals. Neanderthaloids.	Long.	Long.	Broad.	Short and powerful.	Probably very dark.	Probably very dark.	Probably non-Aryan.

ently occupied for the first time at the very beginning of this period, as no trace of Paleolithic industry has been found there, other than the Maglemose, which represents only the very latest phase of the Old Stone Age. The kitchen middens, or refuse heaps, of Sweden and more particularly of Denmark date from the early Neolithic and thus are somewhat earlier than the lake dwellers. Rough pottery occurs in them for the first time, but no traces of agriculture have been found and, as said, the dog seems to have been the only domesticated animal.

From these two centres, the Alps and the North, an elaborate and variegated Neolithic culture spread through western Europe and an autochthonous development took place, comparatively little influenced by trade intercourse with Asia after the first immigrations of the new races.

We may assume that the distribution of races in Europe during the Neolithic was roughly as follows.

The Mediterranean basin and western Europe, including Spain, Italy, Gaul, Britain and parts of western Germany, were populated by Mediterranean long heads. In Britain the Paleolithic population must have been very small and the Neolithic Mediterraneans were the first effectively to open up the country. Even they kept to the open moorlands and avoided the heavily wooded and swampy valleys which to-day are the main centres of population. Before metal and especially iron tools were in use forests were an almost complete barrier to the expansion of an agricultural population.

The Alps and the territories immediately adjacent, with Central Gaul and much of the Balkans, were inhabited by Alpine types. These Alpines extended northward until they came in touch in eastern Germany and Poland with the southernmost Nordics, but as the Carpathians at a much later date, namely, from the fourth to the eighth century A. D., were the centre of radiation of the Alpine Slavs, it is very possible that during the Neolithic the early Nordics lay farther north and east.

North of the Alpines and occupying the shores of the Baltic and Scandinavia, together with eastern Germany, Poland and Russia, were located the Nordics. At the very base of the Neolithic and perhaps still earlier, this race occupied Scandinavia, and Sweden became the nursery of what has been generally called the Teutonic subdivision of the Nordic race. It was in that country that the peculiar characters of stature and blondness became most accentuated and it is there that we find them to-day in their greatest purity.

During the Neolithic the remnants of early Paleolithic man must have been numerous, but later they were either exterminated or absorbed by the existing European races.

During all this Neolithic Period Mesopotamia and Egypt were thousands of years in advance of Europe, but only a small amount of culture from these sources seems to have trickled westward up the valley of the Danube, then and long afterward the main route of intercourse between western Asia and the heart of Europe. Some trade also passed from the Black Sea up the Russian rivers to the Baltic coasts. Along these latter routes there came from the north to the Mediterranean world the amber of the Baltic, a fossil resin greatly prized by early man for its magic electrical qualities.

Gold was probably the first metal to attract the attention of primitive man, but could only be used for purposes of ornamentation. Copper, which is often found in a pure state, was also one of the earliest metals known and probably came first either from the mines of Cyprus or of the Sinai Peninsula. These latter mines are known to have been worked before 3400 B. C. by systematic mining operations and much earlier "the metal must have been obtained by primitive methods from surface ore." It is, therefore, probable that copper was known and used, at first for ornament and later for implements, in Egypt before 4000 B. C. and possibly even earlier in the Mesopotamian regions.

We now reach the confines of recorded history and the first absolutely fixed date, 4241 B. C., is established for lower Egypt by the oldest known calendar. The earliest date as yet for Mesopotamia is somewhat later, but these two countries supply the basis of the chronology of the ancient world until a few centuries before Christ.

With the use of copper the Neolithic fades to its end and the Bronze Age commences soon thereafter. This next step in advance was made apparently before 3000 B. C. when some unknown genius discovered that an amalgam of nine parts of copper to one part of tin would produce the metal we now call bronze, which has a texture and hardness suitable for weapons and tools. The discovery revolutionized the world. The new knowledge was a long time spreading and weapons of this material were of fabulous value, especially in countries where there were no native mines and where spears and swords could only be obtained through trade or conquest. The esteem in which these bronze weapons, and still more the later weapons of iron, were held, is indicated by the innumerable legends and myths concerning magic swords and armor, the possession of which made the owner well-nigh invulnerable and invincible.

The necessity of obtaining tin for this amalgam led to the early voyages of the Phœnicians, who from the cities of Tyre and Sidon and their daughter Carthage traversed the entire length of the Mediterranean, founded colonies in Spain to work the Spanish tin mines, passed the Pillars of Hercules and finally voyaged through the stormy Atlantic to the Cassiterides, the Tin Isles of Ultima Thule. There, on the coasts of Cornwall, they traded with the native British of kindred Mediterranean race for the precious tin. These dangerous and costly voyages become explicable only if the value of this metal for the composition of bronze be taken into consideration.

After these bronze weapons were elaborated in Egypt the knowledge of their manufacture and use was extended through conquest into Palestine, and northward into Asia Minor.

The effect of the possession of these new weapons on the Alpine populations of western Asia was magical and resulted in an intensive and final expansion of round skulls into Europe. This invasion came through Asia Minor, the Balkans and the valley of the Danube, poured into Italy from the north, introduced bronze among the earlier Alpine lake dwellers of Switzerland and among the Mediterraneans of the Terramara stations of the valley of the Po and at a later date reached as far west as Britain and as far north as Holland and Norway, where its traces are still to be found among the living population.

The simultaneous appearance of bronze about 3000 or 2800 B. C. in the south as well as in the north of Italy may possibly be attributed to a lateral wave of this same invasion which, passing through Egypt, where it left behind the so-called Gizeh round skulls, reached Tunis and Sicily. In southern Italy bronze may have been introduced from Crete. With the first knowledge of metals begins the Eneolithic Period of the Italians.

The close resemblance in design and technique among the implements of the Bronze Age in widely separated localities is so great that we can infer a relatively simultaneous introduction.

With the introduction of bronze the custom of incineration of the dead also appears and replaces the typical Neolithic custom of inhumation.

The introduction of bronze into England and into Scandinavia may be safely dated about one thousand years later, after 1800 B. C. The fact that the Alpines only barely reached Ireland indicates that at this time that island was severed from England and that the land connection between England and France had been broken. The computation of the foregoing dates, of course, is somewhat hypothetical, but the fixed fact remains that this last expansion of the Alpines brought the knowledge of bronze to western and northern Europe and to the Mediterranean and Nordic peoples living there.

The effect of the introduction of bronze in the areas occupied chiefly by the Mediterranean race along the Atlantic coast and in Britain, as well as in north Africa from Tunis to Morocco, is seen in the construction and in the wide distribution of the megalithic funeral monuments, which appear to have been erected, not by Alpines but by the dolichocephs. The occurrence of bronze tools and weapons in the interments shows clearly that the megaliths of the south of France date from the beginning of the Bronze Age. The absence of bronze from the dolmens of Brittany may indicate an earlier age. It is, however, more likely that the opening Bronze Age in the South was contemporary with the late Neolithic in the North. The construction and use of these monuments continued at least until the very earliest trace of iron appears and in fact mound burials among the Vikings were common until the introduction of Christianity.

Although there is evidence of very early use of iron in Egypt the knowledge of this metal as well as of bronze in Europe centres around the area occupied by the Alpines in the eastern Alps and its earliest phase is known as the Hallstatt culture, from a little town in the Tyrol where it was first discovered. This Hallstatt iron culture appeared about 1500 B. C. The Alpine Hittites in northeast Asia Minor were probably the first to mine and smelt iron and they introduced it to the Alpines of eastern Europe, but it was the Nordics who benefited by its use. Bronze weapons and the later iron ones proved in the hands of these Northern barbarians to be of terrible effectiveness. With these metal swords in their grasp, the Nordics conquered the Alpines of central Europe and then suddenly entered the ancient world as raiders and destroyers of cities. The classic civilizations of the northern coasts of the Mediterranean Sea fell, one after another, before the "Furor Normanorum," just as two thousand years later the provinces of Rome were devastated by the last great flood of the Nordics from beyond the Alps.

The first Nordics to appear in European history are tribes speaking Aryan tongues in the form of the various Celtic and related dialects in the West, of Umbrian in Italy and of Thracian in the Balkans. These barbarians, pouring down from the North, swept with them large numbers of Alpines whom they had already thoroughly Nordicized. The process of conquering and assimilating the Alpines must have gone on for long centuries before our first historic records and the work was so thoroughly done that the very existence of this Alpine race as a separate subspecies of man was actually forgotten for many centuries by themselves and by the world at large until it was revealed in our own day by the science of skull measurements.

The Hallstatt iron culture did not extend into western Europe and the smelting and extensive use of this metal in southern Britain and northwestern Europe are of much later date and occur in what is called the La Tène Period, usually assigned to the fifth and fourth century B. C.

Iron weapons were, however, known sporadically in England much earlier, perhaps as far back as 800 B. C., but were very rare and were probably importations from the Continent.

"Hallstatt relics have only been found in the northeast or centre of France and it appears that the Bronze Age continued in the remainder of that country until about 700 B. C."

The spread of this La Tène culture is associated with the Nordic Cymry, who constituted the last wave of Celtic-speaking invaders into western Europe, while the earlier Nordic Gauls and Goidels had arrived in Gaul and Britain equipped with bronze only.

In Roman times, following the La Tène Period, the main races of Europe occupied the relative positions which they had held during the whole Neolithic Period and which they hold to-day, with the exception that the Nordic subspecies was less extensively represented in western Europe than when, a few hundred years later, the so-called Teutonic tribes overran these countries; but on the other hand, the Nordics occupied large areas in eastern Germany, Hungary, Poland and Russia now mainly occupied by the Slavs of Alpine race.

Many countries in central Europe were in Roman times inhabited by fair haired, blue eyed barbarians, where now the population is preponderantly brunet and becoming yearly more so.

CHRONOLOGICAL TABLE *

		METALS	
Later Iron	La Tène Culture	Europe	500 B. C.–Roman times
Early Iron	Hallstatt Culture	Europe	1500–500 B. C.
		Orient	1800–1000 B. C.
Bronze		Western and northern Europe	1800–500 B. C.
		Orient	3000–2000 B. C.
		NEOLITHIC	
Late Neolithic Copper, Eneolithic			3000–2000 B. C.
Typical Neolithic	Swiss lake dwellings, Robenhausian culture		5000 B. C.
Early Neolithic	Campignian culture		7000 B. C.
		UPPER PALEOLITHIC	
Postglacial Caves and shelters	Azilian-Tardenoisian	Nordic-Maglemose Furfooz-Grenelle race Proto-Mediterranean race	10,000–7000 B. C.
	Magdalenian	Cro-Magnon race	16,000–10,000 B. C.
	Solutrean	Brünn-Předmost race Cro-Magnon race	25,000–16,000 B. C.
	Aurignacian	Cro-Magnon race	

	MIDDLE PALEOLITHIC	
IV. GLACIATION Würm	Mousterian { Neanderthal race Caves and shelters }	50,000–25,000 B. C.
	LOWER PALEOLITHIC	
III. INTERGLACIAL Riss-Würm	Acheulean, river terraces	75,000 B. C.
	Chellean, river terraces	100,000 B. C.
	Pre-Chellean and Mesvinian, river terraces	125,000 B. C. 150,000 B. C.
	EOLITHIC	
III. GLACIATION Riss		200,000–150,000 B. C.
II. INTERGLACIAL Mindel-Riss	Heidelberg Man	350,000–200,000 B. C.
II. GLACIATION Mindel		400,000–350,000 B. C.
I. INTERGLACIAL Günz-Mindel		475,000–400,000 B. C.
GLACIATION Günz	*Pithecanthropus*	500,000–475,000 B. C.

* After Henry Fairfield Osborn, 1915.

IV

THE ALPINE RACE

THE Alpine race is clearly of Eastern and Asiatic origin. It forms the westernmost extension of a widespread subspecies which, outside of Europe, occupies Asia Minor, Iran, the Pamirs and the Hindu Kush. In fact the western Himalayas were probably its original centre of evolution and radiation and among its Asiatic members is a distinct subdivision, the Armenoids.

The Alpine race is distinguished by a round face and correspondingly round skull which in the true Armenians has a peculiar sugarloaf shape, a character which can be easily recognized. The Alpines must not be confounded with the slit-eyed Mongols who centre around Thibet and the steppes of north Asia. The fact that both these races are round skulled does not involve identity of origin any more than the long skulls of the Nordics and of the Mediterraneans require that they be both considered of the same subspecies, although good anthropologists have been misled by this parallelism. The Alpines are of stocky build and moderately short stature, except sometimes where they have been crossed with Nordic elements. This race is also characterized by dark hair, except where there has been a strong Nordic admixture as in south Germany and Switzerland. In Europe at the present time the eye, also, is usually dark but sometimes grayish. The ancestral Proto-Alpines from the highlands of western Asia must, of course, have had brunet eyes and very dark, probably black, hair. Whether we are justified in considering gray eyes as peculiar to populations of mixed Alpine and Nordic blood is difficult to determine, but one thing is certain, the combination of blue eyes and flaxen hair is never Alpine.

The European Alpines retain very little evidence of their Asiatic origin except the skull shape and have been in contact with the Nordic race so long that in central and western Europe they are everywhere saturated with the blood of that race. Many populations now considered good Germans, such as the majority of the Würtembergers, Bavarians, Austrians, Swiss and Tyrolese are merely Nordicized Alpines.

While the Swiss are to-day neither tall nor long headed, their country was thoroughly conquered early in the Christian era by the Nordic Alemanni who entered from the Rhine Valley. The exodus of soldiers from the forest cantons throughout the Middle Ages to fight as mercenaries in France and Italy gradually drained off this Nordic element until the chief evidence of its former existence lies to-day in the large amount of blondness among the Swiss. With the loss of this type the nation has ceased to be a military community.

The first appearance in Europe of the Alpines dates from the Azilian Period when it is represented by the Furfooz-Grenelle race. There were later several invasions of this race which entered Europe from the Asia Minor plateaux, by way of the Balkans and the valley of the Danube, during Neolithic times and, also, at the beginning of the Bronze Age. It appears also to have passed north of the Black Sea, as some slight traces have been discovered there of round skulls which long antedate the existing population but the Russian brachycephaly of to-day is of much later origin and is due mainly to the eastward spread of Alpines from the regions of the Carpathians since the first centuries of our era.

This race in its final expansion far to the northwest ultimately reached Norway, Denmark and Holland and planted among the dolichocephalic natives small colonies of round skulls, which still exist. These colonies are found along the coast and while of small extent are clearly marked. On the southwestern seaboard of Norway these round heads are dark and relatively short.

When this invasion reached the extreme northwest of Europe its energy was spent and the invaders were soon forced back into central Europe by the Nordics. The Alpines at this time of maximum extension about 1800 B. C. crossed into Britain and a few reached Ireland and introduced bronze into both these islands. As the metal appears about the same time in Sweden it is safe to assume that it was introduced by this invasion.

The men of the Round Barrows in England were Alpines, but their numbers were so scanty that they have left behind them in the skulls of the living population but little demonstrable evidence of their former presence. If we are ever able accurately to analyze the various strains that enter in more or less minute quantities into the blood of the British nation, we shall find many traces of these Round Barrow men as well as other interesting and ancient remnants especially in the western isles and peninsulas.

In the study of European populations the great and fundamental fact about the British Isles is the almost total absence there to-day of true Alpine round skulls. It is the only important state in Europe in which the round skulls play no part and the only nation of any rank composed solely of Nordic and Mediterranean races in approximately equal numbers. To this fact are undoubtedly due many of the individualities and much of the greatness of the English people.

The cephalic index in England is rather low, about 78, but there is a type of tall men, with a tendency to roundheadedness allied to a very marked intellectual capacity, known as the "Beaker Maker" type. They are probably descended from the men of the Round Barrows, who while brachycephalic were tall and presumably dark and entered England on the east and northeast. The Beaker Makers appear at the very end of the Neolithic and, at least in the case of the last of them to arrive, are identified with the Bronze Age.

Before this tall, round headed type reached Britain, they had absorbed many Nordic elements and they have nothing except the skull shape in common with the Alpines living closest, those of Belgium and France. However, they do suggest strongly the Dinaric race of the Tyrol and Dalmatian coast of the Adriatic. In addition to the Beaker Makers remains of short, thick-set brachycephs have also been found in small numbers. These last appear to have been true Alpines.

The invasion of central Europe by Alpines, which occurred in the Neolithic, following in the wake of the Azilian forerunners of the same type—the Furfooz-Grenelle race—represented a very great advance in culture. They brought with them from Asia the art of domesticating animals and the first knowledge of the cereals and of pottery and were an agricultural race in sharp contrast to the flesh eating hunters who preceded them.

The Neolithic populations of the lake dwellings in Switzerland and the extreme north of Italy, which flourished about 5000 B. C., all belonged to this Alpine race. A comparison of the scanty physical remains of these lake dwellers with the inhabitants of the existing villages on the lake shores demonstrates that the skull shape has changed little or not at all during the last seven thousand years and affords us another proof of the persistency of physical characters.

This Alpine race in Europe is now so thoroughly acclimated that it is no longer Asiatic in any respect and has nothing in common with the Mongols except its round skulls. Such Mongolian elements as exist to-day in scattered groups throughout eastern Europe are remnants of the later invasions of Tatar hordes which, beginning with Attila in the fifth century, ravaged eastern Europe for hundreds of years.

In western and central Europe the present distribution of the Alpine race is a substantial recession from its earlier extent and it has been everywhere conquered and subordinated by Celtic- and Teutonic-speaking Nordics. Beginning with the first appearance of the Celtic-speaking Nordics in western Europe, the Alpine race has been obliged to give ground but has mingled its blood everywhere with the conquerors and now after centuries of obscurity it appears to be increasing again at the expense of the master race.

The Alpines reached Spain, as they reached Britain, in small numbers and with spent force but they still persist along the Cantabrian Alps as well as among the French Basques on the northern side of the Pyrenees.

The Anaryan Basque or Euskarian language may be a derivative of the original speech of these Alpines, as its affinities point eastward and toward Asia rather than southward and toward the littoral of Africa and the Hamitic speech of the Mediterranean Berbers. Basque was probably related to the extinct Aquitanian. The Ligurian language, also seemingly Anaryan, if ever closely deciphered may throw some light on the subject. There are dim traces all along the north African coast of a round skull invasion about 3000 B. C. through Syria, Egypt, Tripoli and Tunis and from there through Sicily to southern Italy.

The Alpine race forms to-day, as in Cæsar's time, the great bulk of the population of central France with a Nordic aristocracy resting upon it. They occupy as the lower classes the uplands of Belgium, where, known as Walloons, they speak an archaic French dialect closely related to the ancient *langue d'oïl*. They form a majority of the upland population of Alsace, Lorraine, Baden, Würtemberg, Bavaria, Tyrol, Switzerland and northern Italy; in short, of the entire central *massif* of Europe. In Bavaria and the Tyrol the Alpines are so thoroughly Nordicized that their true racial affinities are betrayed by their round skulls alone.

When we reach Austria we come in contact with the Slavic-speaking nations which form a subdivision of the Alpine race appearing relatively late in history and radiating from the Carpathian Mountains. In western and central Europe in relation to the Nordic race the Alpine is everywhere the ancient, underlying and submerged type. The fertile lands, river valleys and cities are here in the hands of the Nordics but in eastern Germany and Poland we find conditions reversed. That is an old Nordic broodland with a Nordic substratum underlying the bulk of the peasantry, which now consists of round skulled Alpine Slavs. On top of these again we have an aristocratic upper class of comparatively recent introduction and of Saxon origin in eastern Germany. In Austria this upper class is Swabian and Bavarian.

The introduction of Slavs into eastern Germany is believed to have been by infiltration and not by conquest. In the fourth century these Wends were called Venethi, Antes and Sclaveni, and were described as strong in numbers but despised in war. Through the neglect of the Teutons they had been allowed to range far and wide from their homes near the northeastern Carpathians and to occupy the lands formerly belonging to the Nordic nations, who had abandoned their country and flocked into the Roman Empire. Goth, Burgund, Lombard and Vandal were replaced by the lowly Wend and Sorb, whose descendants to-day form the privates in the east German regiments, while the officers are everywhere recruited from the Nordic upper class. The mediæval relation of these Slavic tribes to the dominant Teuton is well expressed in the meaning—slave—which has been attached to their name in western languages.

The occupation of eastern Germany and Poland by the Slavs probably occurred from 400 A. D. to 700 A. D. but these Alpine elements were reinforced from the east and south from time to time during the succeeding centuries. Beginning early in the tenth century, the Saxons under their Emperors, especially Henry the Fowler, turned their attention eastward and during the next two centuries they reconquered and thoroughly Germanized all this section of Europe.

A similar series of changes in racial predominance took place in Russia where in addition to a nobility largely Nordic a section of the population is of ancient Nordic type, although the bulk of the peasantry consists of Alpine Slavs.

The Alpines in eastern Europe are represented by various branches of the "Slavic" nations.

Their area of distribution was split into two sections by the occupation of the great Dacian plain first by the Avars about 600 A. D. and later by the Hungarians about 900 A. D. These Avars and Magyars came from somewhere in eastern Russia beyond the sphere of Aryan speech and their invasions separated the northern Slavs, known as Wends, Czechs, Slovaks, and Poles, from the southern Slavs, known as Serbs and Croats. These southern Slavs entered the Balkan Peninsula in the sixth century from the northeast and to-day form the great mass of the population there.

The centre of radiation of all these Slavic-speaking Alpines was located in the Carpathians, especially the Ruthenian districts of Galicia and eastward to the neighborhood of the Pripet swamps and the head-waters of the Dnieper in Polesia, where the Slavic dialects are believed to have developed and whence they spread throughout Russia about the eighth century. These early Slavs were probably the Sarmatians of the Greek and Roman writers. Their name "Venethi" seems to have been a later designation. The original Proto-Slavic language being Aryan must have been at some distant date imposed by Nordics upon the Alpines, but its development into the present Slavic tongues was chiefly the work of Alpines.

In other words, the expansion of the Alpines of the Slavic-speaking group seems to have occurred after the Fourth Century and they have spread in the East over areas which were originally Nordic, very much as the Teutons had previously overrun and submerged the earlier Alpines in the West. The Mongol, Tatar and Turk who invaded Europe much later reinforced the brachycephalic element in these countries. To some extent the round skulled Alpines in Russia have been reinforced by way of the Caucasus and the route north of the Black Sea by their kindred in western Asia. The greater part of the purely Asiatic types has been thoroughly absorbed and Europeanized except in certain localities in Russia more especially in the east and south, where Mongoloid tribes such as the Mordvins, Bashkirs and Kalmucks have maintained their type either in isolated and relatively large groups or side by side with their Slavic neighbors. In both cases the isolation is maintained through religious and social differences.

The Avars preceded the Magyars in Hungary, but they have merged with the latter without leaving traces that can be identified. Certain Mongoloid characters found in Bulgaria are believed, however, to be of Avar origin.

The original physical type of the Magyars and the European Turks has now practically vanished as a result of prolonged intermarriage with the original inhabitants of Hungary and the Balkans.

These tribes have left little behind but their language and, in the case of the Turks, their religion. The brachycephalic Hungarians to-day resemble the Austrian Germans much more than they do the Slavic-speaking populations adjoining them on the north and south or the Rumanians on the east.

Driven onward by the Avars, the Bulgars appeared south of the Danube about the end of the seventh century, coming originally from eastern Russia where the remnants of their kindred still persist along the Volga. To-day they conform physically in the western half of the country to the Alpine Serbs and in the eastern half to the Mediterranean race, as do also the Rumanians of the Black Sea coast.

Little or nothing remains of the ancestral Bulgars except their name. Language, religion and nearly, but not quite all, of the physical type have disappeared.

The early members of the Nordic race in order to reach the Mediterranean world had to pass through the Alpine populations and must have absorbed a certain amount of Alpine blood. Therefore the Umbrians in Italy and the Gauls of western Europe, while predominantly Nordic, were more mixed especially in the lower classes with Alpine blood than were the Belgæ or Cymry or their successors, the Goths, Vandals, Burgundians, Alemanni, Saxons, Franks, Lombards, Danes and

Northmen, all of whom appear in history as Nordics of the so-called Teutonic group.

In some portions of their range notably Savoy and central France the Alpine race is much less affected by Nordic influence than elsewhere but on the contrary it shows signs of a very ancient admixture with Mediterranean and even earlier elements. Brachycephalic Alpine populations in comparative purity still exist in the interior of Brittany as in Auvergne, although nearly surrounded by Nordic populations.

While the Alpines were everywhere overwhelmed and driven to the fastnesses of the mountains, the warlike and restless nature of the Nordics has enabled the more stable Alpine population to reassert itself slowly, and Europe is probably much less Nordic to-day than it was fifteen hundred years ago.

The early Alpines made very large contributions to the civilization of the world and were the medium through which many advances in culture were introduced from Asia into Europe. This race at the time of its first appearance in the west brought to the nomad hunters a knowledge of agriculture and of primitive pottery and of domestication of animals and thus made possible a great increase in population and the establishment of permanent settlements. Still later its final expansion was the means through which the knowledge of metals reached the Mediterranean and Nordic populations of the west and north. Upon the appearance on the scene of the Nordics the Alpine race temporarily lost its identity and sank to the subordinate and obscure position which it still largely occupies.

In western Asia members of this race seemingly are entitled to the honor of the earliest Mesopotamian civilization of which we have knowledge, namely, that of Sumer and its northerly neighbor Accad in Mesopotamia. It is also the race of early Elam and Media. In fact, the basis of Mesopotamian civilization belongs to this race. Later Babylonia and Assyria were Arabic and Semitic while Persia was Nordic and Aryan.

In classic, mediæval and modern times the Alpines have played an unimportant part in European culture and in western Europe they have been so thoroughly Nordicized that they exist rather as an element in Nordic race development than as an independent type. There are, however, many indications in current history which point to an impending development of civilization in the Slavic branches of this race and the world must be prepared to face changes in the Russias which will, for good or for evil, bring them more closely into touch with western Europe.

V

THE MEDITERRANEAN RACE

The Mediterranean subspecies formerly called the Iberian is a relatively small, light boned, long skulled race, of brunet coloring, becoming even swarthy in certain portions of its range. Throughout Neolithic times and possibly still earlier it seems to have occupied, as it does to-day, all the shores of the Mediterranean including the coast of Africa from Morocco on the west to Egypt on the east. The Mediterraneans are the western members of a subspecies of man which forms a substantial part of the population of Persia, Afghanistan, Baluchistan and Hindustan with perhaps a southward extension into Ceylon.

The Aryanized Afghan and Hindu of northern India speak languages derived from Old Sanskrit and are distantly related to the Mediterranean race. Aside from a common dolichocephaly these peoples are entirely distinct from the Dravidians of south India whose speech is agglutinative and who show strong evidence of profound mixture with the ancient Negrito substratum of southern Asia.

Everywhere throughout the Asiatic portion of its range the Mediterranean race overlies an even more ancient Negroid race. These Negroids still have representatives among the Pre-Dravidians of India, the Veddahs of Ceylon, the Sakai of the Malay Peninsula and the natives of the Andaman Islands.

This Mediterranean subspecies at the close of the Paleolithic spread from the basin of the Inland Sea northward by way of Spain throughout westernmost Europe including the British Isles and, before the final expansion of the Alpines, was widely distributed up to and, possibly, touching the domain of the Nordic dolichocephs. The Mediterraneans did not cross the Alps from the south but spread around the mountains. In attaining to Britain from Spain by way of Central France it is probable that they swept with them Paleolithic remnants from the ancient centre of population in the Auvergne district.

In all this vast range from the British Isles to Hindustan, it is not to be supposed that there is absolute identity of race. Certain portions, however, of the populations of the countries throughout this long stretch do show in their physique clear indications of descent from a Neolithic race of a common original type, which we may call Proto-Mediterranean.

Quite apart from inevitable admixture with late Nordic and early Paleolithic elements, the brunet type of Englishman has had perhaps ten thousand years of independent evolution during which he has undergone selection due to the climatic and physical conditions of his northern habitat. The result is that he has specialized far away from the Proto-Mediterranean race which contributed his blood originally to Britain while it was, probably, still part of continental Europe.

At the other end of their range in India this race, the Mediterraneans, have been crossed with Dravidians and with Pre-Dravidian Negroids. They have also had imposed upon them other ethnic elements which came over through the Afghan passes from the northwest. The resultant racial mixture in India has had its own line of specialization. Residence in the fertile but unhealthy river bottoms, the direct rays of a tropic sun and competition with the immemorial autochthones have unsparingly weeded generation after generation until the existing Hindu has little in common with the ancestral Proto-Mediterranean.

It is to the Mediterranean race in the British Isles that the English, Scotch and Americans owe whatever brunet characters they possess. In western Europe, wherever it exists, it appears to underlie the Alpine race and, in fact, wherever this race is in contact with either the Alpines or the Nordics it would seem to represent the more ancient stratum of the population.

So far as we know this Mediterranean type never existed in Scandinavia and all brunet elements found there can be attributed to introductions in the Bronze Age or in historic times. Nor did the Mediterranean race ever enter or cross the high Alps as did the Nordics at a much later date on their way to the Mediterranean basin from the Baltic coasts.

The Mediterranean race with its Asiatic extensions is bordered everywhere on the north of its enormous range from Spain to India by round skulls but there does not seem to be as much evidence of mixture between these two subspecies of man as there is between the Alpines and the Nordics.

Along its southern boundary the Mediterraneans are in contact with either the long skulled Negroes of Africa or the ancient Negrito population of southern Asia. In Africa this race has drifted southward over the Sahara and up the Nile Valley and has modified the blood of the Negroes in both the Senegambian and equatorial regions.

Beyond these mixtures of blood, there is absolutely no relationship between the Mediterranean race and the Negroes. The fact that the Mediterranean race is long skulled as well as the Negro does not indicate relationship as has been suggested. An overemphasis of the importance of the skull shape as a somatological character can easily mislead and characters other than skull proportions must be carefully considered in determining race.

From a zoological point of view Africa north of the Sahara is now and has been since early Tertiary times a part of Europe. This is true both of animals and of the races of man. The Berbers of north Africa to-day are racially identical with the Spaniards and south Italians while the ancient Egyptians and their modern descendants, the fellaheen, are merely well marked varieties of this Mediterranean race.

The Egyptians fade off toward the west into the so-called Hamitic peoples (to use an obsolete name) of Libya, and toward the south the infusion of Negro blood becomes increasingly great until we finally reach the pure Negro. On the east in Arabia we find an ancient and highly specialized subdivision of the Mediterranean race, which has from time out of mind crossed the Red Sea and infused its blood into the Negroes of east Africa.

To-day the Mediterranean race forms in Europe a substantial part of the population of the British Isles, the great bulk of the population of the Iberian Peninsula, nearly one-third of the population of France, Liguria, Italy south of the Apennines and all the Mediterranean coasts and islands, in some of which like Sardinia it exists in great purity. It forms the substratum of the population of Greece and of the eastern coast of the Balkan Peninsula. Everywhere in the interior of the Balkan Peninsula, except in eastern Bulgaria and parts of Rumania, it has been replaced by the South Slavs and by the Albanians, the latter a mixture of the ancient Illyrians and the Slavs.

In the British Isles the Mediterranean race represents the Pre-Nordic population and exists in considerable numbers in Wales and in certain portions of England, notably in the Fen districts to the northeast of London. In Scotland it is far less marked, but has left its brunetness as an indication of its former prevalence and this dark hair and eye color is very often associated with tall stature.

This is the race that gave the world the great civilizations of Egypt, of Crete, of Phœnicia including Carthage, of Etruria, of Mycenæan Greece, of Assyria and much of Babylonia. It gave us, when mixed and invigorated with Nordic elements, which probably predominated in the upper and ruling classes and imposed their guidance upon the masses, the most splendid of all civilizations, that of ancient Hellas, and the most enduring of political organizations, the Roman state.

To what extent the Mediterranean race entered into the blood and civilization of Rome, it is now difficult to say, but the traditions of the Eternal City, its love of organization, of law and military efficiency, as well as the Roman ideals of family life, of loyalty and truth, point clearly to a northern rather than to a Mediterranean origin, although there must have been some Alpine strains mixed in with the Nordic element.

The struggles in early Rome between Latin and Etruscan and the endless quarrels between patrician and plebeian may have arisen from this existence in Rome, side by side, of two distinct and clashing races, probably Nordic and Mediterranean respectively. The Roman busts that have come down to us often show features of a very Anglo-Saxon cast but with a somewhat round head. The Romans were short in stature in comparison with the nations north of the Alps and in the recently discovered battlefield of the Teutoburgian Forest where Varus and his legions perished in the reign of Augustus the skeletons of the Romans, identified by their armor, were notably smaller and slighter than were those of the German victors. The indications on the whole point to a Nordic aristocracy in Rome with some Alpine elements. The Plebs, on the other hand, was largely Mediterranean and Oriental and finally in the last days of the Republic ceased to contain any purely Roman blood.

The northern qualities of Rome are in sharp contrast to the less European traits of the classic Greeks, whose volatile and analytical spirit, lack of cohesion, political incapacity and ready resort to treason all point clearly to southern and eastern affinities.

While very ancient, located for probably ten thousand years in western and southern Europe, and even longer on the south shore of the Mediterranean, nevertheless this subspecies cannot be called purely European. Its occupation of the north coast of Africa and the west coast of Europe can be traced everywhere by its beautifully polished stone weapons and tools. The megalithic monuments also, which are found in association with this race, may mark its line of advance in western Europe, although they extend beyond the range of the Mediterraneans into the domain of the Scandinavian Nordics. These huge stone structures were chiefly sepulchral memorials and are very suggestive of the Egyptian funeral monuments. They date back to the first knowledge of the manufacture and use of bronze tools by the Mediterranean race. They occur in great numbers, size and variety along the north coast of Africa and up the Atlantic seaboard through Spain, Brittany and England to Scandinavia.

It is admitted that the various groups of the Mediterranean race did not speak in the first instance any form of Aryan tongue and we know that these languages were introduced into the Mediterranean world by invaders from the north.

In Spain the language of the Nordic invaders was Celtic and is believed to have nearly died out by Roman times. Its remnants and the ancient speech of the natives were in turn superseded, along with the Phœnician spoken in some of the southern coast towns, by the Latin of the conquering Roman. Latin mixed with some small elements of Gothic construction and Arabic vocabulary forms to-day the basis of modern Portuguese, Castilian and Catalan.

The native Mediterranean race of the Iberian Peninsula quickly absorbed the blood of these Celtic-speaking Nordic Gauls, just as it later diluted beyond recognition the vigorous physical characters of the Nordic Vandals, Suevi and Visigoths. A certain amount of Nordic blood still persists to-day in northern Spain, especially in Galicia and along the Pyrenees, as well as generally among the upper classes. According to classic writers there were light and dark types in Spain in Roman times. The Romans left no evidence of their domination except in their language and religion; while the earlier Phœnicians on the coasts and the later swarms of Moors and Arabs all over the peninsula, but chiefly in the south, were closely related by race to the native Iberians.

That portion of the Mediterranean race which inhabits southern France occupies most of the territory of ancient Languedoc and Provence and it was these Provençals who developed and preserved during the Middle Ages the romantic civilization of the Albigensians, a survival of classic culture which was drowned in blood by a crusade from the north in the thirteenth century.

In northern Italy only the coast of Liguria is occupied by the Mediterranean race. In the valley of the Po the Mediterraneans predominated during the early Neolithic but with the introduction of bronze the Alpines appear and round skulls to this day prevail north of the Apennines. About 1100 B. C. the Nordic Umbrians and Oscans swept over the Alps from the northeast, conquered northern Italy and introduced their Aryan speech, which gradually spread southward. The Umbrian state was afterward overwhelmed by the Tyrrhenians or Etruscans, who were of Mediterranean race and who, by 800 B. C. had extended their empire northward to the Alps and temporarily checked the advance of the Nordics. In the sixth century B. C. new swarms of Nordics, coming this time from Gaul and speaking Celtic dialects, seized the valley of the Po and in 382 B. C. these Gauls, heavily reinforced from the north and under the leadership of Brennus, stormed Rome and completely destroyed the Etruscan power. From that time onward the valley of the Po became known as Cisalpine Gaul. Mixed with other Nordic elements, chiefly Gothic and Lombard, this population persists to this day, and is the backbone of modern Italy.

A continuation of this movement of these Gauls, or Galatians as the Greek world called them, starting from northern Italy occurred a century later when these Nordics suddenly appeared before Delphi in Greece in 279 B. C. and then crossed into Asia Minor and founded the state called Galatia, which endured until Christian times.

South Italy until its conquest by Rome was Magna Græcia and the population to-day retains many Pelasgian Greek elements. It is among these classic remnants that artists search for the handsomest specimens of the Mediterranean race. In Sicily also the race is purely Mediterranean in spite of the admixture of types coming from the neighboring coasts of Tunis. These intrusive elements, however, were all of kindred race. Traces of Alpines in these regions and on the adjoining African coast are very scarce and wherever found may be referred to the final wave of round skull invasion which introduced bronze into Europe.

In Greece the Mediterranean Pelasgians speaking a Non-Aryan tongue were conquered by the Nordic Achæans, who entered from the northeast according to tradition prior to 1250 B. C. probably between 1400 and 1300 B. C. Doubtless there were still earlier waves of these same Nordic invaders as far back as 1700 B. C., which was a period of general unrest and migration throughout the ancient world.

The Nordic Achæans and Mediterranean Pelasgians as yet unmixed stand out in clear contrast in the Homeric account of the ten year siege of Troy, which is generally assigned to the date of 1194 to 1184 B. C.

The same invasion that brought the Achæans into Greece brought a related Nordic people to the coast of Asia Minor, known as Phrygians. Of this race were the Trojan leaders.

Both the Trojans and the Greeks were commanded by huge blond princes, the heroes of Homer—in fact, even the Gods were fair haired—while the bulk of the armies on both sides was composed of little brunet Pelasgians, imperfectly armed and remorselessly butchered by the leaders on either side. The only common soldiers mentioned by Homer as of the same race as the heroes were the Myrmidons of Achilles.

About the time that the Achæans and the Pelasgians began to amalgamate, new hordes of Nordic barbarians collectively called Hellenes entered from the northern mountains and destroyed this old Homeric-Mycenæan civilization. This Dorian invasion took place a little before 1100 B. C. and brought in the three main Nordic strains of Greece, the Dorian, the Æolian and the Ionian groups, which remain more or less distinct and separate throughout Greek history. Among these Nordics the Dorians may have included some Alpine elements. It is more than probable that this invasion or swarming of Nordics into Greece was part of the same general racial upheaval that brought the Umbrians and Oscans into Italy.

Long years of intense and bitter conflict follow between the old population and the newcomers and when the turmoil of this revolution settled down classic Greece appears. What was left of the Achæans retired to the northern Peloponnesus and the survivors of the early Pelasgian population remained in Messenia serving as helots their Spartan masters. The Greek colonies in Asia Minor were founded largely by refugees fleeing from these Dorian invaders.

The Pelasgian strain seems to have persisted best in Attica and the Ionian states. The Dorian Spartans appear to have retained more of the character of the northern barbarians than the Ionian Greeks but the splendid civilization of Hellas was due to a fusion of the two elements, the Achæan and Hellene of Nordic and the Pelasgian of Mediterranean race.

The contrast between Dorian Sparta and Ionian Athens, between the military efficiency, thorough organization and sacrifice of the citizen for the welfare of the state, which constituted the basis of Lacedæmonian power, and the Attic brilliancy, instability and extreme development of individualism, is strikingly like the contrast between Prussia with its Spartan-like culture and France with its Athenian versatility.

To this mixture of races in classic Greece the Mediterranean Pelasgians contributed their Mycenæan culture and the Nordic Achæans and Hellenes contributed their Aryan language, fighting efficiency and the European aspect of Greek life.

The first result of a crossing of two such contrasted subspecies as the Nordic and Mediterranean races has repeatedly been a new outburst of civilization. This occurs as soon as the older race has imparted to the conquerors its culture and before the victors have allowed their blood to be attenuated by mixture. This process seems to have happened several times in Greece.

Later, in 338 B. C., when the original Nordic blood had been hopelessly diluted by mixture with the ancient Mediterranean elements, Hellas fell an easy prey to Macedon. The troops of Philip and Alexander were Nordic and represented the uncultured but unmixed ancestral type of the Achæans and Hellenes. Their unimpaired fighting strength was irresistible as soon as it was organized into the Macedonian phalanx, whether directed against their degenerate brother Greeks or against the Persians, whose original Nordic elements had also by this time practically disappeared. When in its turn the pure Macedonian blood was impaired by intermixture with Asiatics, they, too, vanished and even the royal Macedonian dynasties in Asia and Egypt soon ceased to be Nordic or Greek except in language and customs.

It is interesting to note that the Greek states in which the Nordic element most predominated outlived the other states. Athens fell before Sparta and Thebes outlived them both. Macedon in classic times was considered quite the most barbarous state in Hellas and was scarcely recognized as forming part of Greece, but it was through the military power of its armies and the genius of Alexander that the Levant and western Asia became Hellenized. Alexander with his Nordic features, aquiline nose, fair skin, gently curling light hair and mixed eyes, the left blue and the right very black, typifies this Nordic conquest of the Near East.

It is scarcely possible to-day to find in purity the physical traits of the ancient race in the Greek-speaking lands and islands and it is chiefly among the pure Nordics of Anglo-Norman type that there occur those smooth and regular classic features, especially the brow and nose lines, that were the delight of the sculptors of Hellas.

To what extent any of the blood of the ancient Hellenes flows in the veins of the Greeks of to-day is difficult to determine but it should be found, if anywhere, in Crete and in the Ægean Islands.

The modern Greek is trying to purify his language back to classic Ionian and to appropriate the traditions of the mighty Past, but to do this something more is needed than the naming of children after Agamemnon and Hecuba. Even in Roman times, the ancient Greek of the classic period was little more than a tradition and the term Græculus given to the contemporary Hellenes was one of contempt.

Concerning the physical type of classic in contrast to Homeric Greece, we know that the Greeks were predominantly long headed and of relatively short stature in comparison with the northern barbarians. The modern Greeks are also relatively short in stature, but are moderately round headed. As to color these modern Greeks are substantially all dark as to eye and hair, with a somewhat swarthy skin.

Among Albanians and such Greeks as show blond traits light eyes are more than ten times as numerous as light hair. The Albanians are members of the tall, round headed Dinaric race and have distant relationship with the Nordics. They may possibly represent an ancient cross between Nordics and Alpines and they constitute to-day a marked subdivision of the latter. They resemble the Round Barrow brachycephs who entered Britain just before or at the opening of the Bronze Age and who are still scantily represented among the living English and Welsh. This type called the Beaker Maker or Borreby type is characterized by a moderately round head and great stature, strength and considerable intellectual force. The Albanian or Dinaric type was not, so far as we know, represented in ancient Greece although some modern archæologists have suggested that the Spartans were of this type. We have as yet no evidence of the color, size and skull shape of the Spartans, but we do know that their Dorian ancestors claimed to have come from or through the mountains of northern Epirus (Albania). The Dorian dialects are also said to be more closely related to modern Albanian —which is derived from the ancient Illyrian—than are the Ionian dialects. The Spartan character, if that be any test of race, was heavy, slow and steady, and would indicate northern rather than Mediterranean antecedents.

Concerning modern Europe north of the Alps, culture came from the south and not from the east and to the Mediterranean subspecies is due the foundation of our civilization. The ancient Mediterranean world was for the most part of this race; the long-sustained civilization of Egypt, which endured for thousands of years in almost uninterrupted sequence; the brilliant Minoan Empire of Crete, which flourished between 3000 and 1200 B. C. and was the ancestor of the Mycenæan cultures of Greece, Cyprus, Italy and Sardinia; the mysterious Empire of Etruria, the predecessor and teacher of Rome; the Hellenic states and colonies throughout the Mediterranean and Black Seas; the maritime and mercantile power of Phœnicia and its mighty colony, imperial Carthage; all were the creation of this race. The sea empire of Crete, when its royal palace at Cnossos was burned by the 'sea peoples' of the north, passed to Tyre, Sidon and Carthage and from them to the Greeks. The early development of the art of navigation is to be attributed to this race and from them the North centuries later learned its maritime architecture.

Even though the Mediterranean race has no claim to the invention of the synthetic languages and though it played a relatively small part in the development of the civilization of the Middle Ages or of modern times, nevertheless to it belongs the chief credit of the classic civilization of Europe in the sciences, art, poetry, literature and philosophy, as well as the major part of the civilization of Greece and a very large share in the Empire of Rome.

In the Eastern Empire the Mediterraneans were the predominant factor under the guise of Byzantine Greeks. Owing to the fact that our histories have been written under the influence of Roman orthodoxy and because in the eyes of the Frankish Crusaders the Byzantine Greeks were heretics, they have been regarded by us as degenerate cowards.

But throughout the Middle Ages Byzantium represented in unbroken sequence the Empire of Rome in the East and as the capital of that Empire it held Mohammedan Asia in check for nearly a thousand years. When at last in 1453 the imperial city deserted by western Christendom was stormed by the Ottoman Turks and Constantine, last of Roman Emperors, fell sword in hand there was enacted one of the greatest tragedies of all time.

With the fall of Constantinople the Empire of Rome passes finally from the scene of history and the development of civilization is transferred from Mediterranean lands and from the Mediterranean race to the North Sea and to the Nordic race.

VI

THE NORDIC RACE

We have shown that the Mediterranean race entered Europe from the south and forms part of a great group of peoples extending into southern Asia, that the Alpine race came from the east through Asia Minor and the valley of the Danube and that its present European distribution is merely the westernmost point of an ethnic pyramid, the base of which rests solidly on the round skulled peoples of the great plateaux of central Asia. Both of these races are, therefore, western extensions of Asiatic subspecies and neither of them can be considered as exclusively European.

With the remaining race, the Nordic, however, the case is different. This is a purely European type, in the sense that it has developed its physical characters and its civilization within the confines of that continent. It is, therefore, the *Homo europæus*, the white man par excellence. It is everywhere characterized by certain unique specializations, namely, wavy brown or blond hair and blue, gray or light brown eyes, fair skin, high, narrow and straight nose, which are associated with great stature and a long skull, as well as with abundant head and body hair.

A composite picture of this Nordic race and remarkable examples of its best contemporary types can be found in the English illustrated weeklies, which are publishing during this great war the lists and portraits of their officers who have fallen in battle. No nation, not even England although richly endowed with a Nordic gentry, can stand the loss of so much good blood. Here is the evidence, if such be needed, of the actual Passing of the Great Race.

Abundance of hair is an ancient and generalized character which the Nordics share with the Alpines of both Europe and Asia, but the light colored eyes and light colored hair are characters of relatively recent specialization and consequently highly unstable.

The pure Nordic race is at present clustered around the shores of the Baltic and North Seas from which it has spread west and south and east fading off gradually into the two preceding races.

The centre of its greatest purity is now in Sweden and there is no doubt that at first the Scandinavian Peninsula and later, also, the immediately adjoining shores of the Baltic were the centres of radiation of the Teutonic or Scandinavian branch of this race.

The population of Scandinavia has been composed of this Nordic subspecies from the commencement of Neolithic times and Sweden to-day represents one of the few countries which has never been overwhelmed by foreign conquest and in which there has been but a single racial type from the beginning. This nation is unique in its unity of race, language, religion and social ideals.

Southern Scandinavia only became fit for human habitation on the retreat of the glaciers about twelve thousand years ago and apparently was immediately occupied by the Nordic race. This is one of the few geological dates which is absolute and not relative. It rests on a most interesting series of computations made by Baron DeGeer, based on an actual count of the laminated deposits of clay laid down annually by the retreating glaciers, each layer representing the summer deposit of the subglacial stream.

The Nordics first appear at the close of the Paleolithic along the coasts of the Baltic. The earliest industry discovered in this region, named the Maglemose and found in Denmark and elsewhere around the Baltic, is probably the culture of the Proto-Teutonic branch of the Nordic race. No human remains in connection therewith have been found.

The vigor and power of the Nordic race as a whole is such that it could not have been evolved in so restricted an area as southern Sweden although its Teutonic or Scandinavian section did develop there in comparative isolation. The Nordics must have had a larger field for their specialization and a longer period for their evolution than is afforded by the limited time which has elapsed since Sweden became habitable. For the development of so marked a type there is required a continental area isolated and protected for long ages from the intrusion of other races. The climatic conditions must have been such as to impose a rigid elimination of defectives through the agency of hard winters and the necessity of industry and foresight in providing the year's food, clothing and shelter during the short summer. Such demands on energy if long continued would produce a strong, virile and self-contained race which would inevitably overwhelm in battle nations whose weaker elements had not been purged by the conditions of an equally severe environment.

An area conforming to these requirements is offered by the forests and plains of eastern Germany, Poland and Russia. It was here that the Proto-Nordic type evolved and here their remnants are found. They were protected from Asia on the east by the then almost continuous water connections across eastern Russia between the White Sea and the old Caspian-Aral Sea.

During the last glacial advance (known as the

Würm) which, like the preceding glaciations, is believed to have been a period of land depression, the White Sea extended far to the south of its present limits, while the enlarged Caspian Sea, then and long afterward connected with the Sea of Aral, extended northward to the great bend of the Volga. The intermediate area was studded with large lakes and morasses. Thus an almost complete water barrier of shallow sea located just west of the low Ural Mountains, separated Europe from Asia during the Würm glaciation and the following period of glacial retreat. The broken connection was restored just before the dawn of history by a slight elevation of the land and the shrinking of the Caspian-Aral Sea through the increasing desiccation which has left its present surface below sea level.

An important element in the maintenance of the isolation of this Nordic cradle on the south is the fact that from earliest times down to this day the pressure of population has been unchangeably from the bleak and sterile north, southward and eastward, into the sunny but enervating lands of France, Italy, Greece, Persia and India.

In these forests and steppes of the north, the Nordic race gradually evolved in isolation and at an early date spread north over the Scandinavian Peninsula together with much of the land now submerged under the Baltic and North Seas.

Nordic strains form everywhere a substratum of population throughout Russia and underlie the round skulled Slavs who first appear a little over a thousand years ago as coming not from the direction of Asia but from south Poland. Burial mounds called kurgans are widely scattered throughout Russia from the Carpathians to the Urals and contain numerous remains of a dolichocephalic race,—in fact, more than three-fourths of the skulls are of this type. Round skulls first become numerous in ancient Russian graveyards about 900 A. D. and soon increase to such an extent that in the Slavic period from the ninth to the thirteenth centuries one-half of the skulls were brachycephalic, while in modern cemeteries the proportion of round skulls is still greater. The ancient Nordic element, however, still forms a very considerable portion of the population of northern Russia and contributes the blondness and the red-headedness so characteristic of the Russian of to-day. As we leave the Baltic coasts the Nordic characters fade out both toward the south and east. The blond element in the nobility of Russia is of later Scandinavian and Teutonic origin.

When the seas which separated Russia from Asia dried, when the isolation and exacting climate of the north had done their work and produced the vigorous Nordic type, and when in the fulness of time bronze for their weapons reached them these men burst upon the southern races, conquering east, south and west. They brought with them from the north the hardihood and vigor acquired under the rigorous selection of a long winter season and vanquished in battle the inhabitants of older and feebler civilizations, but only to succumb in their turn to the softening influences of a life of ease and plenty in their new homes.

The earliest recorded appearance of Aryan-speaking Nordics is our first dim vision of the Sacæ introducing Sanskrit into India, the Cimmerians pouring through the passes of the Caucasus from the grasslands of South Russia to invade the Empire of the Medes and the Achæans and Phrygians conquering Greece and the Ægean coast of Asia Minor. About 1100 B. C. Nordics enter Italy as Umbrians and Oscans and soon after other Nordics cross the Rhine into Gaul. The latter were the western vanguard of the Celtic-speaking tribes which had long occupied those districts in Germany which lay south and west of the Teutonic Nordics. These Teutons at this early date were confined probably to Scandinavia and the immediate shores of the Baltic and were just beginning to press southward.

This first Celtic wave of Nordics seems to have swept westward along the sandy plains of northern Europe, and entered France through the Low Countries. From this point as Goidels they spread north into Britain, reaching there about 800 B. C. As Gauls they conquered all France and pushed on southward and westward into Spain and over the Maritime Alps into northern Italy, where they encountered the kindred Nordic Umbrians, who at an earlier date had crossed the Alps from the northeast. Other Celtic-speaking Nordics apparently migrated up the Rhine and down the Danube and by the time the Romans came on the scene the Alpines of central Europe had been thoroughly Celticized. These tribes pushed eastward into southern Russia and reached the Crimea as early as the fourth century B. C. Mixed with the natives, they were called by the Greeks the Celto-Scyths. This swarming out of what is now called Germany of the first Nordics was during the closing phases of the Bronze Period and was contemporary with and probably caused by the first great expansion of the Teutons from Scandinavia by way both of Denmark and the Baltic coasts.

These invaders were succeeded by a second wave of Celtic-speaking peoples, the Cymry or Brythons, who drove their Goidelic predecessors still farther westward and exterminated and absorbed them over large areas. These Cymric invasions occurred about 300–100 B. C. and were probably the result of the growing development of the Teutons and their final expulsion of the Celtic-speaking tribes from Germany. These Cymry occupied northern

France under the name of Belgæ and invaded England as Brythons in several waves, the last being the true Belgæ. The conquests of these Cymric tribes in both Gaul and Britain were only checked by the legions of Rome.

These migrations are exceedingly hard to trace because of the confusion caused by the fact that Celtic speech is now found on the lips of populations in nowise related to the Nordics who first introduced it. But one fact stands out clearly, all the original Celtic-speaking tribes were Nordic.

What were the special physical characters of these tribes in which they differed from their Teutonic successors is now impossible to say, beyond the possible suggestion that in the British Isles the Scottish and Irish populations in which red hair and gray or green eyes are abundant have rather more of this Celtic strain in them than have the flaxen haired Teutons, whose china-blue eyes are clearly not Celtic.

When the peoples called Gauls or Celts by the Romans and Galatians by the Greeks first appear in history they are described in exactly the same terms as were later the Teutons. They were all gigantic barbarians with fair and very often red hair, then more frequent than to-day, with gray or fiercely blue eyes and were thus clearly members of the Nordic subspecies.

The first Celtic-speaking nations with whom the

Romans came in contact were Gaulish and had probably incorporated much Alpine blood by the time they crossed the mountains into the domain of classic history. The Nordic element had become still weaker by absorption from the conquered populations when at a later date the Romans broke through the ring of Celtic nations and came into contact with the Nordic Cymry and Teutons.

After these early expansions of Gauls and Cymry the Teutons appear upon the scene. Of the pure Teutons within the ken of history, it is not necessary to mention more than the most important of the long series of conquering tribes.

The greatest of them all were perhaps the Goths, who came originally from the south of Sweden and were long located on the opposite German coast at the mouth of the Vistula. From here they crossed Poland to the Crimea where they were known in the first century. Three hundred years later they were driven westward by the Huns and forced into the Dacian plain and over the Danube into the Roman Empire. There they split up; the Ostrogoths after a period of subjection to the Huns on the Danube, ravaged the European provinces of the Eastern Empire, conquered Italy and founded there a great but shortlived nation. The Visigoths occupied much of Gaul and then entered Spain driving the Nordic Vandals before them into Africa. The Teutons and Cimbri, destroyed by Marius in southern Gaul about 100 B. C., the Gepidæ, the Alans, the Suevi, the Vandals, the Alemanni of the upper Rhine, the Marcomanni, the Saxons, the Batavians, the Frisians, the Angles, the Jutes, the Lombards and the Heruli of Italy, the Burgundians of the east of France, the Franks of the lower Rhine, the Danes, and, latest of all, the Norse Vikings emerge from the northern forests and seas one after another and sweep through history. Less well known but of great importance are the Varangians, who coming from Sweden in the ninth and tenth centuries, conquered the coast of the Gulf of Finland and much of White Russia and left there a dynasty and aristocracy of Nordic blood. In the tenth and eleventh centuries they were the rulers of Russia.

The traditions of Goths, Vandals, Lombards and Burgundians all point to Sweden as their earliest homeland and probably all the pure Teutonic tribes came originally from Scandinavia and were closely related.

When these Teutonic tribes poured down from the Baltic coasts, their Celtic-speaking Nordic predecessors were already much mixed with the underlying populations, Mediterranean in the west and Alpine in the south. These "Celts" were not recognized by the Teutons as kin in any sense and were all called, Welsh, or foreigners. From this word are derived the names "Wales," "Cornwales" or "Cornwall," "Valais," "Walloons," and "Vlach" or "Wallachian."

VII

TEUTONIC EUROPE

No proper understanding is possible of the meaning of the history of Christendom or full appreciation of the place in it of the Teutonic Nordics without a brief review of the events in Europe of the last two thousand years.

When Rome fell and changed trade conditions necessitated the transfer of power from its historic capital in Italy to a strategic situation on the Bosporus, western Europe was definitely and finally abandoned to its Teutonic invaders. These same barbarians swept up again and again to the Propontis, only to recoil before the organized strength of the Byzantine Empire and the walls of Mikklegard. The final line of cleavage between the western and eastern Empires corresponded closely to the boundaries of Latin and Greek speech and differences of language no doubt were the chief cause of the political and later of the religious divergence between them.

Until the coming of the Alpine Slavs the Eastern Empire still held in Europe the Balkan Peninsula and much of the eastern Mediterranean. The Western Empire, however, collapsed utterly under the impact of hordes of Nordic Teutons at a much earlier date. In the fourth and fifth centuries of our era north Africa, once the empire of Carthage, had become the seat of the kingdom of Nordic Vandals. Spain fell under the control of the Visigoths and Lusitania, now Portugal, under that of the Suevi. Gaul was Visigothic in the south and Burgundian in the east, while the Frankish kingdom dominated the north until it finally absorbed and incorporated all the territories of ancient Gaul and made it the land of the Franks. Strictly speaking, the northern half of France and the adjoining districts, the country of Langued'oil, is the true land of the Franks while the southern Languedoc was never Frankish except by conquest, and was never as thoroughly Nordicized as the north. Whatever Nordic elements are still to be found there are Gothic and Burgundian but not Frankish.

Italy fell under the control first of the Ostrogoths and then of the Lombards. The purely Nordic Saxons with kindred tribes conquered the British Isles and meanwhile the Norse and Danish Scandinavians contributed a large element to all the coast populations as far south as Spain and the Swedes organized in the eastern Baltic what is now Russia.

Thus when Rome passed all Europe had become superficially Teutonic. At first these Teutons were isolated and independent tribes bearing some shadowy relation to the one organized state they knew, the Empire of Rome. Then came the Mohammedan invasion, which reached western Europe from Africa and destroyed the Visigothic kingdom. The Moslems swept on unchecked until their light horsemen dashed themselves to pieces against the heavy armed cavalry of Charles Martel and his Franks at Tours in 732 A. D.

The destruction of the Vandal kingdom by the armies of the Byzantine Empire, the conquest of Spain by the Moors and finally the overthrow of the Lombards by the Franks were all greatly facilitated by the fact that these barbarians, Vandals, Goths, Suevi and Lombards, with the sole exception of the Franks, were originally Christians of the Arian or Unitarian confession and as such were regarded as heretics by their orthodox Christian subjects. The Franks alone were converted from heathenism directly to the Trinitarian faith to which the old populations of the Roman Empire adhered. From this orthodoxy of the Franks arose the close relation between France, "the eldest daughter of the church," and the papacy, a connection which lasted for more than a thousand years—in fact nearly to our own day.

With the Goths eliminated western Christendom became Frankish. In the year 800 A. D.

Charlemagne was crowned at Rome and re-established the Roman Empire in the west, which included all Christendom outside of the Byzantine Empire. In some form or shape this Roman Empire endured until the beginning of the nineteenth century and during all that time it formed the basis of the political concept of European man.

This same concept lies to-day at the root of the imperial idea. Kaiser, Tsar and Emperor each takes his name and in some way undertakes to trace his title from Cæsar and the Empire. Charlemagne and his successors claimed and often exercised overlordship as to all the other continental Christian nations and when the Crusades began it was the German Emperor who led the Frankish hosts against the Saracens. Charlemagne was a German Emperor, his capital was at Aachen within the present limits of the German Empire and the language of his court was German. For several centuries after the conquest of Gaul by the Franks their Teutonic tongue held its own against the Latin speech of the Romanized Gauls.

The history of all Christian Europe is in some degree interwoven with this Holy Roman Empire. Though the Empire was neither holy nor Roman but altogether secular and Teutonic, it was, nevertheless, the heart of Europe for ages. Holland and Flanders, Lorraine and Alsace, Burgundy and Luxemburg, Lombardy and the Veneto, Switzerland and Austria, Bohemia and Styria are states which were originally component parts of the Empire although many of them have since been torn away by rival nations or have become independent, while much of northern Italy remained under the sway of Austria within the memory of living men.

The Empire wasted its strength in imperial ambitions and foreign conquests instead of consolidating, organizing and unifying its own territories and the fact that the imperial crown was elective for many generations before it became hereditary in the House of Hapsburg checked the unification of Germany during the Middle Ages.

A strong hereditary monarchy, such as arose in England and in France, would have anticipated the Germany of to-day by a thousand years and made it the predominant state in Christendom, but disruptive elements in the persons of great territorial dukes were successful throughout its history in preventing an effective concentration of power in the hands of the Emperor.

That the German Emperor was regarded, though vaguely, as the overlord of all Christian monarchs was clearly indicated when Henry VIII of England and Francis I of France appeared as candidates for the imperial crown against Charles of Spain, afterward the Emperor Charles V.

Europe was the Holy Roman Empire and the Holy Roman Empire was Europe predominantly until the Thirty Years' War. This war was perhaps the greatest catastrophe of all the ghastly crimes committed in the name of religion. It destroyed an entire generation, taking each year for thirty years the finest manhood of the nations.

Two-thirds of the population of Germany was destroyed, in some states such as Bohemia three-fourths of the inhabitants were killed or exiled, while out of 500,000 inhabitants in Würtemberg there were only 48,000 left at the end of the war. Terrible as this loss was, the destruction did not fall equally on the various races and classes in the community. It bore, of course, most heavily upon the big blond fighting man and at the end of the war the German states contained a greatly lessened proportion of Nordic blood. In fact, from that time on the purely Teutonic race in Germany has been largely replaced by the Alpine types in the south and by the Wendish and the Polish types in the east. This change of race in Germany has gone so far that it has been computed that out of the 70,000,000 inhabitants of the German Empire, only 9,000,000 are purely Teutonic in coloration, stature and skull characters. The rarity of pure Teutonic and Nordic types among the German immigrants to America in contrast to its almost universal prevalence among those from Scandinavia is traceable to the same cause.

In addition, the Thirty Years' War virtually destroyed the land owning yeomanry and lesser gentry formerly found in mediæval Germany as numerously as in France or in England. The religious wars of France, while not as devasting to the nation as a whole as was the Thirty Years' War in Germany, nevertheless greatly weakened the French cavalier type, the "petite noblesse de province." In Germany this class had flourished and throughout the Middle Ages contributed great numbers of knights, poets, thinkers, artists and artisans who gave charm and variety to the society of central Europe. But, as said, this section of the population was practically exterminated in the Thirty Years' War and this class of gentlemen practically vanishes from German history from that time on.

When the Thirty Years' War was over there remained in Germany nothing except the brutalized peasantry, largely of Alpine derivation in the south and east, and the high nobility which turned from the toils of endless warfare to mimic on a small scale the court of Versailles. After this long struggle the boundaries in central Europe between the Protestant North and the Catholic South follow in a marked degree the frontier between the northern plain inhabited chiefly by Nordics and the more mountainous countries in the south populated almost entirely by Alpines.

It has taken Germany two centuries to recover her vigor, her wealth and her aspirations to a place in the sun.

During these years Germany was a political nonentity, a mere congeries of petty states bickering and fighting with each other, claiming and owning only the Empire of the Air as Napoleon happily phrased it. Meantime France and England founded their colonial empires beyond the seas.

When in the last generation Germany became unified and organized, she found herself not only too late to share in these colonial enterprises, but also lacking in much of the racial element and still more lacking in the very classes which were her greatest strength and glory before the Thirty Years' War. To-day the ghastly rarity in the German armies of chivalry and generosity toward women and of knightly protection and courtesy toward the prisoners or wounded can be largely attributed to this annihilation of the gentle classes. The Germans of to-day, whether they live on the farms or in the cities, are for the most part descendants of the peasants who survived, not of the brilliant knights and sturdy foot soldiers who fell in that mighty conflict. Knowledge of this great past when Europe was Teutonic and memories of the shadowy grandeur of the Hohenstaufen Emperors, who, generation after generation, led Teutonic armies over the Alps to assert their title to Italian provinces, have played no small part in modern German consciousness.

These traditions and the knowledge that their own religious dissensions swept them from the leadership of the European world lie at the base of the German imperial ideal of to-day and it is for this ideal that the German armies are dying, just as did their ancestors for a thousand years under their Fredericks, Henrys, Conrads and Ottos.

But the Empire of Rome and the Empire of Charlemagne are no more and the Teutonic type is divided almost equally between the contending forces in this world war. With the United States in the field the balance of pure Nordic blood will be heavily against the Central Powers, which pride themselves on being "the Teutonic powers."

Germany is too late and is limited to a destiny fixed and ordained for her on the fatal day in 1618 when the Hapsburg Ferdinand forced the Protestants of Bohemia into revolt.

Although as a result of the Thirty Years' War the German Empire is far less Nordic than in the Middle Ages, the north and northwest of Germany are still Teutonic throughout and in the east and south the Alpines have been thoroughly Germanized with an aristocracy and upper class very largely of pure Teutonic blood.

VIII

THE EXPANSION OF THE NORDICS

The men of Nordic blood to-day form practically all the population of Scandinavian countries, as also a majority of the population of the British Isles and are almost pure in type in Scotland and eastern and northern England. The Nordic realm includes nearly all the northern third of France with extensions into the fertile southwest; all the rich lowlands of Flanders; all Holland; the northern half of Germany with extensions up the Rhine and down the Danube; and the north of Poland and of Russia. Recent calculations indicate that there are about 90,000,000 of purely Nordic physical type in Europe out of a total population of 420,000,000.

Throughout southern Europe a Nordic nobility of Teutonic type everywhere forms the old aristocratic and military classes or what now remains of them. These aristocrats, by as much as their blood is pure, are taller and blonder than the native populations, whether these be Alpine in central Europe or Mediterranean in Spain or in the south of France and Italy.

The countries speaking Low German dialects are almost purely Nordic but the populations of High German speech are very largely Teutonized Alpines and occupy lands once Celtic-speaking. The main distinction between the two dialects is the presence of a large number of Celtic elements in High German.

In northern Italy there is a large amount of Nordic blood. In Lombardy, Venice and elsewhere throughout the country the aristocracy is blonder and taller than the peasantry, but the Nordic element in Italy has declined noticeably since the Middle Ages. From Roman times onward for a thousand years the Teutons swarmed into northern Italy, through the Alps and chiefly by way of the Brenner Pass. With the stoppage of these Nordic reinforcements this strain seems to have grown less all through Italy.*

In the Balkan Peninsula there is little to show for the floods of Nordic blood that have poured in for the last 3,500 years, beginning with the Achæans of Homer, who first appeared *en masse* about 1400 B. C. and were followed successively by the Dorians, Cimmerians and Gauls, down to the Goths and the Varangians of Byzantine times.

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* Procopius tells a significant story which illustrates the contrast in racial character between the natives and the barbarians. He relates that, at the surrender of Ravenna in 540 A. D. by the Goths to the army of the Byzantines, "when the Gothic women saw how swarthy, small men of mean aspect had conquered their tall, robust, fair-skinned barbarians, they were furious and spat in their husbands' faces and cursed them for cowards."

The tall stature of the population along the Illyrian Alps from the Tyrol to Albania on the south is undoubtedly of Nordic origin and dates from some of these early invasions, but these Illyrians have been so crossed with Slavs that all other blond elements have been lost and the existing population is essentially of brachycephalic Alpine type. They are known as the Dinaric race. What few remnants of blondness occur in this district, more particularly in Albania, as well as the so-called Frankish elements in Bosnia, may probably be attributed to later infiltrations.

The Tyrolese seem to be largely Nordic except in respect to their round skull.

In Russia and in Poland the Nordic stature, blondness and long skull grow less and less pronounced as one proceeds south and east from the Gulf of Finland.

It would appear that in all those parts of Europe outside of its natural habitat, the Nordic blood is on the wane from England to Italy and that the ancient, acclimated and primitive populations of Alpine and Mediterranean race are subtly reasserting their long lost political power through a high breeding rate and democratic institutions.

In western Europe the first wave of the Nordic tribes appeared about three thousand years ago and was followed by other invasions with the Nordic element becoming stronger until after the fall of

PROVISIONAL OUTLINE OF NORDIC INVASIONS AND METAL CULTURES

	B. C.	GREAT BRITAIN	SCANDINAVIA	GERMANY AND AUSTRIA	FRANCE AND SPAIN	ITALY	RUSSIA, GREECE, AND BALKANS	ASIA MINOR	NORTH AFRICA AND EGYPT	MESOPOTAMIA AND PERSIA	INDIA AND CHINA	B. C.	
1.	Before 3000	Neolithic.	Neolithic. Rough pottery. Domesticated dog.	Neolithic.	Neolithic.	Terramara culture.	3000 B. C. Commencement of early Minoan in Crete. Copper.	Alpines (Hissarlik). Founding of Troy. Copper in Cyprus Introduction of bronze from Egypt.	Copper for ornaments, 4000. Copper systematically mined, 3400 Pieces of iron from interior of Great Pyramid of Gizeh, 3733. ——Discovery	Copper for ornaments. Early Babylonian graves. Cylinder seals at Fâra about 3400. Cuneiform writing.	Mongolian bands come from west into the Yellow River Valley.	Before 3000	1
2	3000–2500	Neolithic. ——	Neolithic. ——	Copper. Great expansion of Alpines, introducing bronze into Austria and later into Germany.	Copper.	Copper. Great expansion of Alpines, introducing bronze into north Italy. Bronze introduced in South from Crete. Eneolithic culture.——	Great expansion of Alpines, introducing bronze from Asia Minor.	Bronze smelting	Gizeh skulls; Alpine. First illustration of ship in Egypt, 2800. Pyramids, Memphis.	of Bronze. —— Ur in Sumer. Nippur, 3000–2500. Beginning of greatness of Babylonia. Sargon of Accad (Semitic), 2750.	Chinese claim first empire, 2850–2750	3000–2500	2
3.	2500–1800	Copper.	——Transition from	stone to bronze.——			Middle Minoan in Crete, 2000–1800. Second city of Hissarlik—2000.	Destruction of Hissarlik II.	Period of agricultural depression with invasions from the desert. Feudal Age in Egypt.	Sumer and Accad unite, 2500. Babylon under Hammurapi supreme, 2100. First horses from Kassites in Elam.	Phonetic writing in China, probably at 2000 B. C.	2500–1800	3
4.	1600–1600	Alpine invasion with bronze culture. Round Barrows. Megaliths.	Alpine invasion with bronze culture reaches Denmark and southwest Norway.		Alpine invasion with bronze culture in France. Later, same wave of invasion enters Spain. Megaliths.		Early Nordic invasions. Cnossos. Mycenæan culture.	Beginnings of Hittite Empire.	Hyksos in Egypt, 1700. First horses.	Kassite dynasty of Babylon begins. Kassites and Mitanni, 1700–1400.——		1800–1600	4
5.	1600–1400	——Full	Bronze Age.——	Hallstatt iron culture in Austrian Tyrol has first beginning.			Late Minoan in Crete, 1600–1450.	First Aryan names of deities—Cappadocia. Hittite Empire with iron.	Egyptian Empire at Thebes, 1600–1150 Egyptian campaigns in Asia. Conquest of Syria.	First Nordics in Persia.	First Nordics enter India. Nordic states in Punjab. Nordic invasions.——	1600–1400	5
6.	1400–1200					Villanova culture.	Last Minoan, 1450–1200.—— Mycenæan culture. Bronze. Nordic Achæans from south Russia introduce Aryan speech, 1400–1300. Have iron swords. 1200. Transition from bronze to iron in Crete.	Nordic Phrygians. (Trojan leaders.) Hittites—Alpines——	Hittites invade Syria. Rameses II. 1230. Sea peoples (Achæans) attack Egypt.	Semitic Babylonians overrun Sumer.		1400–1200	6
7.	1200–1000		Beginning of cremation. Nordic Teutons cross from Scandinavia to south coasts of Baltic and to Denmark.	Hallstatt iron culture flourishes Mixed inhumation and incineration. Goidels occupy Germany.	Cadiz founded in Spain, c. 1100, by Phœnicians.	c. 1100. Umbrians and Oscans introduce first Aryan speech from northeast. Iron in Etruria, 1100.	Hallstatt iron. Trojan war, 1194–1184. Nordic Hellenes—Dorians—enter Greece, 1100. Iron in full development.	Armenians acquire Aryan tongue.	Phœnicia supreme at sea.		Nordic Sacæ introduce Sanskrit into India.	1200–1000	7
8	1000–800 ——800	First Nordics—Goidels. First iron swords, 800. First Aryan speech.		First invasion of Nordic Teutons from Scandinavia. Other Celtic Nordics on Rhine and Danube, who Celticized the Alpines.	1000. Nordic Goidels cross Rhine and introduce Aryan speech (Gaulish). Hallstatt iron culture. Before 950 Phœnicians masters of more than half of Spain.	First settlements on the site of Rome.	Iron common in Greece.	Greek colonies in Asia Minor.	Carthage founded, 813.	Zoroaster. Nordic Persians recorded at Lake Urmia, 900. Iron mines at Carchemish. Assyrian chronology begins, 911 B. C.		1000–800	8
9	800–600			The Goidels are driven south and west by the Cymry. Expansion of the Cymry. Pressure of Teutons in north. Last Goidels expelled from Germany. Iron swords in Central Europe.	Gauls in France.	Expansion of Mediterranean Etruscans over Umbrians to Alps. Legendary founding of Rome, 753. First Greek colonies in south Italy—Magna Græcia.	Iron Age in Russia. Megarian colonization, 700. Greek colonies in Italy and Sicily. Appearance of Cimmerians.	Early Nordic raids. Cimmerians, 650.		Invasion of Scythians. Assyrian Empire, 750–606, with armies equipped with iron borrowed from the Hittites. Semitic Chaldeans rebuild Babylon.	Nordic Hiung-nu in western China become restless.	800–600	9
10.	600–400	First Goidels in Ireland, 600. La Tène iron. ——	La Tène iron.——	La Tène iron culture. Cymric Belgæ driven westward by Teutons.	La Tène iron culture in France. Nordic Goidels cross Pyrenees and introduce Aryan speech in Spain. First Gallic money of Marseilles, silver.	Nordic Gauls in valley of Po—Cisalpine Gaul.	500. End of non-Aryan speech in Crete. Invasion of Scythia by Darius, 512 B. C. Persian wars, 500–449.	Tyre under Babylonian yoke.	Persian conquest, 525. The last of the native Pharaohs.	Nordic Persians overthrow Medes, 550 Reign of Darius, 525–485.	Confucius, 551–479. Buddha, c 557–477.	600–400	10
11.	400–300				La Tène iron in Spain. Cymric Belgæ conquer northern France. Bronze money in western France.	Gauls under Brennus sack Rome, 382, and destroy Etruria New invasion of Nordics into Cisalpine Gaul.	Macedon conquers Greece, 338. Celto-Scyths in Crimea, 4th century B. C. Alexander the Great, 356–323.		Alexander conquers Egypt, 332.	Conquests of Alexander.	Conquests of Alexander in India, 327.	400–300	11
12.	300–200	Cymric Belgæ—invasion, c. 300. Known as Brythons.	Great expansion of Nordic Teutons out of Scandinavia.	Expansion of Teutons and expulsion of Cymry as far west as the Weser. c. 250. First Teutons in Austria Gold, silver, and bronze money.	Gold coinage in northeast France. Bronze coinage in the southwest. Gaul fertile and well cultivated.	Expansion of Rome. Punic Wars, 264–146.——	Decline of Scythians in Russia, and appearance in Russia of Alpine Sarmatians. Nordic Galatians enter Thrace and Greece—Delphi, 279; cross into Asia Minor and found Galatia	Nordic Galatians, 279.			Nordic Wu-Suns in Chinese Turkestan and Ting-Ling in Siberia. Ts'in dynasty (255–209) resist Nomads and secure China against them by building the Great Wall.	300–200	12
13.	200–100	Few Cymry or Brythons in Ireland.		Teutons drive Cymry out of Germany. Teutons cross the Rhine.	Teutons enter France. Marius destroys Teutones and Cimbri, 100 B. C.	Slaves imported in Rome to work the latifundia.				Nordic Alans	in Sogdiana. Kian-Kuan in Turkestan. Hiung-nu, turned westward, drove the Wu-sun into the mountains about Ili and the great Yue-chih into the Tarim basin.	200–100	13
14.	100 to Christian Era	55. Julius Cæsar. Copper and iron money as currency.			Cæsar conquers Gaul, 59–51.	Augustus and the organization of the Roman Empire. Extinction of old Romans.						100 to Christian Era	14
15				Defeat of Varus and Roman legions in old Saxony, 9 A. D.			Sarmatians appear in Danube valley, 50 A. D.						15

Rome whole tribes moved into its provinces, Teutonizing them more or less for varying lengths of time.

These incoming Nordics intermarried with the native populations and were gradually bred out and the resurgence of the old native stock, chiefly Alpine, has proceeded steadily since the Frankish Charlemagne destroyed the Lombard kingdom and is proceeding with unabated vigor to-day. This process was greatly accelerated in western Europe by the Crusades, which were extremely destructive to the Nordic feudal lords, especially the Frankish and Norman nobility and was continued by the wars of the Reformation and by those of the Revolution. The world war now in full swing with its toll of millions will leave Europe much poorer in Nordic blood. One of its most certain results will be the partial destruction of the aristocratic classes everywhere in northern Europe. In England the nobility has already suffered in battle more than in any century since the Wars of the Roses. This will tend to realize the standardization of type so dear to democratic ideals. If equality cannot be obtained by lengthening and uplifting the stunted of body and of mind, it can be at least realized by the destruction of the exalted of stature and of soul. The bed of Procrustes operates with the same fatal exactness when it shortens the long as when it stretches the undersized.

The first Nordics in Spain were the Gauls who crossed the western Pyrenees about the end of the sixth century before our era and introduced Aryan speech into the Iberian Peninsula. They quickly mixed with Mediterranean natives and the composite Spaniards were called Celtiberians by the Romans.

In Portugal and Spain there are in the physical structure of the population few traces of these early Celtic-speaking Nordic invaders but the Suevi, who a thousand years later occupied parts of Portugal, and the Vandals and Visigoths, who conquered and held Spain for 300 years, have left some small evidence of their blood. In the provinces of northern Spain a considerable percentage of light colored eyes reveals these Nordic elements in the population.

Deep seated Castilian traditions associate aristocracy with blondness and the *sangre azul*, or blue blood of Spain, probably refers to the blue eye of the Goth, whose traditional claim to lordship is also shown in the Spanish name for gentleman, "hidalgo," said to mean "the son of the Goth." The fact that the blood shows as "blue" through the fair Nordic skin is also to be taken into account.

As long as this Gothic nobility controlled the Spanish states during the endless crusades against the Moors, Spain belonged to the Nordic kingdoms, but when their blood became impaired by losses in wars waged outside of Spain and in the conquest of the Americas, the sceptre fell from this noble race into the hands of the native Iberian, who had not the physical vigor or the intellectual strength to maintain the world empire built up by the stronger race. For 200 years the Spanish infantry had no equal in Europe but this distinction disappeared with the opening decades of the seventeenth century.

The splendid conquistadores of the New World were of Nordic type, but their pure stock did not long survive their new surroundings and to-day they have vanished utterly, leaving behind them only their language and their religion. After considering well these facts we shall not have to search further for the causes of the collapse of Spain.

Gaul at the time of Cæsar's conquest was under the rule of the Nordic race, which furnished the bulk of the population of the north as well as the military classes elsewhere and, while the Romans killed off an undue proportion of this fighting element, the power and vigor of the French nation have been based on this blood and its later reinforcements. In fact, in the Europe of to-day the amount of Nordic blood in each nation is a very fair measure of its strength in war and standing in civilization. The proportion of men of pure type of each constituent race to the mixed type is also a powerful factor.

When, about 1000 B. C., the first Nordics crossed the lower Rhine they found the Mediterranean race in France everywhere overwhelmed by an Alpine population except in the south. Long before the time of Cæsar the Celtic language of these invaders had been imposed upon the entire population and the country had been saturated with Nordic blood, except in Aquitaine which seems to have retained until at least that date its Anaryan Iberian speech. These earliest Nordics in the west were known to the ancient world as Gauls. These Gauls, or "Celts," as they were called by Cæsar, occupied in his day the centre of France. The actual racial complexion of this part of France was overwhelmingly Alpine then and is so now, but this population had been Celticized thoroughly by the Gauls, just as it was Latinized as completely at a later date by the Romans.

The northern third of France, that is above Paris, was inhabited in Cæsar's time by the Belgæ, a Nordic people of the Cymric division of Celtic speech. They were largely of Teutonic blood and in fact should be regarded as the immediate forerunners of the Germans. They probably represent the early Teutons who had crossed from Sweden and adopted the Celtic speech of their Nordic kindred whom they found on the mainland. These Belgæ had followed the earlier Goidels across Germany into Britain and Gaul and were rapidly displacing their Nordic predecessors, who by this time were much weakened by mixture with the autochthones, when Rome appeared upon the scene and set a limit to their conquests by the Pax Romana.

The Belgæ of the north of France and the Low Countries were the bravest of the peoples of Gaul, according to Cæsar's oft-quoted remark, but the claim of the modern Belgians to descent from this race is without basis and rests solely on the fact that the present kingdom of Belgium, which only became independent and assumed its proud name in 1831, occupies a small and relatively unimportant corner of the land of the Belgæ. The Flemings of Belgium are Nordic Franks speaking a Low German tongue and the Walloons are Alpines whose language is an archaic French.

The Belgæ and the Goidelic remnants of Nordic blood in the centre of Gaul taken together probably constituted only a small minority in blood of the population, but were everywhere the military and ruling classes. These Nordic elements were later reinforced by powerful Teutonic tribes, namely, Vandals, Visigoths, Alans, Saxons, Burgundians and, most important of all, the Franks of the lower Rhine, who founded modern France and made it for long centuries "*la grande nation*" of Christendom.

The Frankish dynasties long after Charlemagne were of purely Teutonic blood and the aristocratic land owning and military classes down to the great Revolution were very largely of this type, which by the time of the creation of the Frankish kingdom had incorporated all the other Nordic elements of old Roman Gaul, both Gaulish and Belgic.

The last invasion of Teutonic-speaking barbarians was that of the Danish Northmen, who were, of course, of unmixed Nordic blood and who conquered and settled Normandy in 911 A. D. No sooner had the barbarian invasions ceased than the ancient aboriginal blood strains, Mediterranean, Alpine and elements derived from Paleolithic times, began a slow and steady recovery. Step by step with the reappearance of these primitive and deep rooted stocks the Nordic element in France declined and with it the vigor of the nation. Even in Normandy the Alpines now tend to predominate and the French blonds are becoming more and more limited to the northeastern and eastern provinces.

The chief historic events of the last thousand years have hastened this process and the fact that the Nordic element everywhere forms the fighting section of the community caused the loss in war to fall disproportionately as among the three races in France. The religious wars greatly weakened the Nordic provincial nobility, which was before the Massacre of St. Bartholomew largely Protestant and the extermination of the upper classes was hastened by the Revolutionary and Napoleonic wars. These last wars are said to have shortened the stature of the French by four inches; in other words, the tall Nordic strain was killed off in greater proportions than the little brunet.

When by universal suffrage the transfer of power was completed from a Nordic aristocracy to lower classes predominantly of Alpine and Mediterranean extraction, the decline of France in international power set in. In the country as a whole, the long skulled Mediterraneans are also yielding rapidly to the round skulled Alpines and the average of the cephalic index in France has steadily risen since the Middle Ages and is still rising.

The survivors of the aristocracy, being stripped of political power and to a large extent of wealth, quickly lost their caste pride and committed class suicide by mixing their blood with inferior breeds. One of the most conspicuous features of some of the French nobility of to-day is the strength of Oriental and Mediterranean strains in them. Being for political reasons ardently clerical the nobility welcomes recruits of any racial origin as long as they bring with them money and devotion to the Church.

The loss in war of the best stock through death, wounds or absence from home has been clearly shown in France. The conscripts who were examined for military duty in 1890–2 were those descended in a large measure from the military rejects and other stay-at-homes during the Franco-Prussian War. In Dordogne this contingent showed seven per cent more deficient statures than the normal rate. In some cantons this unfortunate generation was in height an inch below the recruits of preceding years and in it the exemptions for defective physique rose from the normal six per cent to sixteen per cent.

When each generation is decimated or destroyed in turn a race can be injured beyond recovery but it more frequently happens that the result is the annihilation of an entire class, as in the case of the German gentry in the Thirty Years' War. Desolation of wide districts often resulted from the plagues and famines which followed the armies in old days but deaths from these causes fall most heavily on the weaker part of the population. The loss of valuable breeding stock is far more serious when wars are fought with volunteer armies of picked men than with conscript armies, because in the latter cases the loss is more evenly spread over the whole nation. Before England resorted in the present war to universal conscription the injury to her more desirable and patriotic classes was much more pronounced than in Germany where all types and ranks were called to arms.

In the British Isles we find, before the appearance of the Nordic race, a Mediterranean population and no important element of Alpine blood, so that at the present day we have to deal with only two of the main races instead of all three as in France. In Britain there were, as elsewhere, representatives of earlier races but the preponderant strain of blood was Mediterranean before the first arrival of the Aryan-speaking Nordics.

Ireland was connected with Britain and Britain with the continent until times very recent in a geological sense. The depression of the Channel coasts is progressing rapidly to-day and is known to have been substantial during historic times. The close parallel in blood and culture between England and the opposite coasts of France also indicates a very recent land connection, possibly in early Neolithic times. Men either walked from the continent to England and from England to Ireland, or they paddled across in primitive boats or coracles. The art of ship-building or even archaic navigation cannot go much further back than late Neolithic times.

The Nordic tribes of Celtic speech came to the British Isles in two distinct waves. The earlier invasion of the Goidels, who were still in the Bronze culture, arrived in England about 800 B. C. and in Ireland two centuries later. It was part of the same movement which brought the Gauls into France. The later conquest was by the Cymric-speaking Belgæ who were equipped with iron weapons. It began in the third century B. C. and was still going on in Cæsar's time. These Cymric Brythons found the early Goidels, with the exception of the aristocracy, much weakened by intermixture with the Mediterranean natives and would probably have destroyed all trace of Goidelic speech in Ireland and Scotland, as they actually did in England, if the Romans had not intervened. The Brythons reached Ireland in small numbers only in the second century B. C.

These Nordic elements in Britain, both Goidelic and Brythonic, were in a minority during Roman times and the ethnic complexion of the island was not much affected by the Roman occupation, as the legions stationed there represented the varied racial stocks of the Empire.

After the Romans abandoned Britain and about 400 A. D., floods of pure Nordics poured into the islands for nearly six centuries, arriving in the north as the Norse pirates, who made Scotland Scandinavian, and in the east as Saxons and Angles, who founded England.

The Angles came from somewhere in central Jutland and the Saxons came from coast lands immediately at the base of the Danish Peninsula. All these districts were then and are now almost purely Teutonic; in fact, this is part of old Saxony and is to-day the core of Teutonic Germany.

These Saxon districts sent out at that time swarms of invaders not only into England but into France and over the Alps into Italy, just as at a much later period the same land sent swarming colonies into Hungary and Russia.

The same Saxon invaders passed down the Channel coasts and traces of their settlement on the mainland remain to this day in the Cotentin district around Cherbourg. Scandinavian sea peoples called Danes or Northmen swarmed over as late as 900 A. D. and conquered all eastern England. This Danish invasion of England was the same that brought the Northmen or Normans into France. In fact the occupation of Normandy was probably by Danes and the conquest of England was largely the work of Norsemen, as Norway at that time was under Danish kings.

Both of these invasions, especially the later, swept around the greater island and inundated Ireland, driving both the Neolithic aborigines and their Celtic-speaking masters into the bogs and islands of the west.

The blond Nordic element to-day is very marked in Ireland as in England. It is derived, to some extent, from the early invaders of Celtic speech, but the Goidelic element has been very largely absorbed in Ireland as in western England and in Scotland by the Iberian substratum of the population and is found to-day rather in the form of

Nordic characters in brunets than in the entirely blond individuals who represent later and purer Nordic strains.

The figures for recruits taken some decades ago in the two countries would indicate that the Irish as a whole are considerably lighter in eye and darker in hair color than are the English. The combination of black Iberian hair with blue or gray Nordic eyes is frequently found in Ireland and also in Spain and in both these countries is justly admired for its beauty, but it is by no means an exclusively Irish type.

The tall, blond Irishmen are to-day chiefly Danish with the addition of English, Norman and Scotch elements, which have poured into the lesser island for a thousand years and have imposed the English speech upon it. The more primitive and ancient elements in Ireland have always shown great ability to absorb newcomers and during the Middle Ages it was notorious that the Norman and English colonists quickly sank to the cultural level of the natives.

In spite of the fact that Paleoliths have not been found there some indications of Paleolithic man appear in Ireland both as single characters and as individuals. Being, like Brittany, situated on the extreme western outposts of Eurasia, it has more than its share of generalized and low types surviving in the living populations and these types, the Firbolgs, have imparted a distinct and very undesirable aspect to a large portion of the inhabitants of the west and south and have greatly lowered the intellectual status of the population as a whole. The cross between these elements and the Nordics appears to be a bad one and the mental and cultural traits of the aborigines have proved to be exceedingly persistent and appear especially in the unstable temperament and the lack of coordinating and reasoning power, so often found among the Irish. To the dominance of the Mediterraneans mixed with Pre-Neolithic survivals in the south and west are to be attributed the aloofness of the island from the general trend of European civilization and its long adherence to ancient forms of religion and even to Pre-Christian superstitions.

In England, the same two ethnic elements are present, namely the Nordic and the Mediterranean. There is, especially in Wales and in the west central counties of England, a large substratum of ancient Mediterranean blood but the later Nordic elements are everywhere superimposed upon it.

Scotland is by race Anglian in the Lowlands and Norse in the Highlands with underlying Goidelic and Brythonic elements, which are exceedingly hard to identify. The Mediterranean strain is marked in the Highlands and is frequently associated with tall stature.

This brunetness in Scotland is, of course, derived from the same underlying Mediterranean stock which we have found elsewhere in the British Islands.

The inhabitants of Scotland before the arrival of the Celtic-speaking Nordics seem to have been the Picts, whose language was almost surely Non-Aryan. Judging from the remnants of Anaryan syntax in the Goidelic and to a lesser degree in the Cymric languages, Pictish was related to the Anaryan Berber tongues still spoken in North Africa. No trace of this Pre-Aryan syntax is found in English.

Where one race imposes a new language on another, the change is most marked in the vocabulary while the ancient usage in syntax or the construction of sentences is the more apt to survive and these ancient forms often give us a valuable clew to the aboriginal speech. This same Anaryan syntax is particularly marked in the Irish language, a condition which fits in with the other Pre-Aryan usages and types found there.

This divergence between the new vocabulary and the ancient habits of syntax is probably one of the causes of the extreme splitting up of the various branches of the Aryan mother tongue.

Wales, like western Ireland, is a museum of racial antiquities and being an unattractive and poor country has exported men rather than received immigration, while such invasions as did arrive came with spent force.

The mass of the population of Wales especially in the upland or moorland districts is Mediterranean, with a considerable addition of Paleolithic remnants. With changing social and industrial conditions these Neolithic Mediterraneans are pushing into the valleys or towns with a resultant replacement of the Nordic types.

Recent and intensive investigations reveal everywhere in Wales distinct physical types living side by side or in adjoining villages unchanged and unchangeable throughout the centuries. Extensive blending has not taken place though much crossing has occurred and the persistence of the skull shape has been particularly marked. Such individuals as are of pure Nordic type are generally members of the old county families and land owning class.

As to language in Wales, the Cymric is everywhere spoken in various dialects, but there are indications of the ancient underlying Goidelic. In fact, Brythonic or Cymric may not have reached Wales much before the Roman conquest of Britain. The earlier Goidelic survived in parts of Wales as late as the seventh century but by the eleventh century all consciousness of race and linguistic distinctions had disappeared in the common name of Cymry. This name should perhaps be limited to the Brythons of England and not used for their kindred on the Continent.

In Cornwall and along the Welsh border racial types are often grouped in separate villages and the intellectual and moral distinctions between them are well recognized.

The Nordic species of man in its various branches made Gaul the land of the Franks and made Britain the land of the Angles and the Englishmen who built the British Empire and founded America were of the Nordic and not of the Mediterranean type.

One of the most vigorous Nordic elements in France, England and America was contributed by the Normans and their influence on the development of these countries cannot be ignored. The descendants of the Danish and Norse Vikings who settled in Normandy as Teutonic-speaking heathen and who as Normans crossed over to Saxon England and conquered it in 1066 are among the finest and noblest examples of the Nordic race. Their only rivals in these characters were the early Goths.

This Norman strain, while purely Nordic, seems to have been radically different in its mental make-up, and to some extent in its physical detail from the Saxons of England and also from their kindred in Scandinavia.

The Normans appear to have been "*fine race*," to use a French idiom and their descendants are often characterized by a tall, slender figure, much less bulky than the typical Teuton, of proud bearing and with clearly marked features of classic Greek regularity. The type is seldom extremely blond and is often dark. These Latinized Vikings were and are animated by a restless and nomadic energy and by a fierce aggressiveness. They played a brilliant role during the twelfth and following centuries but later, on the continent, this strain ran out, though leaving here and there traces of its former presence, notably in Sicily where the grayish blue Sicilian eye called "the Norman eye" is still found among the old noble families.

The Norman type is still very common among the English of good family and especially among hunters, explorers, navigators, adventurers and officers in the British army. These latter-day Normans are natural rulers and administrators and it is to this type that England largely owes her extraordinary ability to govern justly and firmly the lower races. This Norman blood occurs often among the native Americans but with the changing social conditions and the filling up of the waste places of the earth it is doomed to a speedy extinction.

The Normans were Nordics with a dash of brunet blood and their conquest of England strengthened the Nordic and not the Mediterranean elements in the British Isles, but the connection once established with France especially with Aquitaine later introduced from southern France certain brunet elements of Mediterranean affinities.

The upper class Normans on their arrival in England were probably purely Scandinavian, but in the lower classes there were some dark strains. They brought with them large numbers of ecclesiastics who were, for the most part drawn from the more ancient types throughout France. Careful investigation of the graveyards and vaults in which these churchmen were buried revealed a large percentage of round skulls among them.

In both Normandy and in the lowlands of Scotland there was much the same mixture of blood between Scandinavian and Saxon but with a smaller amount of Saxon blood in France. The result in both cases was the production of an extraordinarily forceful race.

The Nordics in England are in these days apparently receding before the Neolithic Mediterranean type. The causes of this decline are the same as in France and the chief loss is through the wastage of blood by war and through emigration.

The typical British soldier is blond or red bearded and the typical sailor is always a blond. The migrating type from England is also chiefly Nordic. These facts would indicate that nomadism as well as love of war and adventure are Nordic characteristics.

An extremely potent influence, however, is the transformation of the nation from an agricultural to a manufacturing community. Heavy, healthful work in the fields of northern Europe enables the Nordic type to thrive, but the cramped factory and crowded city quickly weed him out, while the little brunet Mediterranean can work a spindle, set type, sell ribbons or push a clerk's pen far better than the big, clumsy and somewhat heavy Nordic blond, who needs exercise, meat and air and cannot live under Ghetto conditions.

The increase of urban communities at the expense of the countryside is also an important element in the fading of the Nordic type, because the energetic countryman of this blood is more apt to improve his fortunes by moving to the city than the less ambitious Mediterranean.

The country villages and the farms are the nurseries of nations, while cities are consumers and seldom producers of men. The effort now being made in America to settle undesirable immigrants on farms may, from the viewpoint of race replacement, be more dangerous than allowing them to remain in crowded Ghettos or tenements.

If England has deteriorated and there are those who think they see indications of such decline, it is due to the lowering proportion of the Nordic blood and the transfer of political power from the vigorous Nordic aristocracy and middle classes to the radical and labor elements, both largely recruited from the Mediterranean type.

Only in Scandinavia and northwestern Germany does the Nordic race seem to maintain its full vigor in spite of the enormous wastage of three thousand years of the swarming forth of its best fighting men. Norway, however, after the Viking outburst has never exhibited military power and Sweden, in the centuries between the Varangian period and the rise of Gustavus Adolphus, did not enjoy a reputation for fighting efficiency. All the three Scandinavian countries after vigorously attacking Christendom a thousand years ago disappear from history as a nursery for soldiers until the Reformation when Sweden suddenly reappears just in time to save Protestantism on the Continent. To-day all three seem to be intellectually anæmic.

Upper and Lower Austria, the Tyrol and Styria have a very considerable Nordic element which is in political control but the Alpine races are slowly replacing the Nordics both there and in Hungary.

Holland and Flanders are purely Teutonic, the Flemings being the descendants of those Franks who did not adopt Latin speech as did their Teutonic kin across the border in Artois and Picardy; and Holland is the ancient Batavia with the Frisian coast lands eastward to old Saxony.

Denmark, Norway and Sweden are purely Nordic and yearly contribute swarms of a splendid type of immigrants to America and are now, as they have been for thousands of years, the chief nursery and broodland of the master race.

In southwestern Norway and in Denmark, there is a substantial number of short, dark round heads of Alpine affinities. These dark Norwegians are regarded as somewhat inferior socially by their Nordic countrymen. Perhaps as a result of this disability, a disproportionately large number of Norwegian immigrants to America are of this type. Apparently America is doomed to receive in these later days the least desirable classes and types from each European nation now exporting men.

In mediæval times the Norse and Danish Vikings sailed not only the waters of the known Atlantic, but ventured westward through the fogs and frozen seas to Iceland, Greenland and America.

Sweden, after sending forth her Goths and other early Teutonic tribes, turned her attention to the shores of the eastern Baltic, colonized the coast of Finland and the Baltic provinces and supplied also a strong Scandinavian element to the aristocracy of Russia.

The coast of Finland is as a result Swedish and the natives of the interior have distinctly Nordic characters with the exception of the skull, which in its roundness shows an Alpine cross.

The population of the so-called Baltic provinces of Russia is everywhere Nordic and their affinities are with Scandinavia and Germany rather than with Slavic Moscovy. The most primitive Aryan languages, namely, Lettish, Lithuanian and the recently extinct Old Prussian, are found in this neighborhood and here we are not far from the original Nordic homeland.

IX

THE NORDIC FATHERLAND

The area in Europe where the Nordic race developed and in which the Aryan languages originated probably included the forest region of eastern Germany, Poland and Russia, together with the grasslands which stretched from the Ukraine eastward into the steppes south of the Ural. From causes already mentioned this area was long isolated from the rest of the world and especially from Asia. When the unity of the Aryan race and of the Aryan language was broken up at the end of the Neolithic and the beginning of the Bronze Age, wave after wave of the early Nordics pushed westward along the sandy plains of the north and pressed against and through the Alpine populations of central Europe. Usually these early Nordics, as indeed many of the later ones, constituted only a thin layer of ruling classes and there must have been many countries conquered by them in which we have no historic evidence of their existence, linguistic or otherwise. This must have certainly been the case in those numerous instances where only the leaders were Nordics and the great mass of their followers slaves or serfs of inferior races.

The Nordics also swept down through Thrace into Greece and Asia Minor, while other large and important groups entered Asia partly through the Caucasus Mountains, but in greater strength they migrated around the northern and eastern sides of the Caspian-Aral Sea.

That portion of the Nordic race which continued to inhabit south Russia and grazed their flocks of sheep and herds of horses on the grasslands were the Scythians of the Greeks and from these nomad shepherds came the Cimmerians, Persians, Sacæ, Massagetæ and perhaps the leaders of the Kassites, Mitanni and other early Aryan-speaking Nordic invaders of Asia. The descendants of these Nordics are scattered throughout Russia but are now submerged by the later Slavs.

Well marked characters of the Nordic race, which were established in Neolithic times if not earlier, enable us to distinguish it definitely wherever it appears in history and we know that all the blondness in the world is derived from this source. As blondness is easily observed and recorded we are apt to lay too much emphasis on this single character. The brown shades of hair are equally Nordic.

When the Nordics first enter the Mediterranean world their arrival is everywhere marked by a new and higher civilization. In most cases the contact of the vigorous barbarians with the ancient civilizations created a sudden impulse of life and an outburst of culture as soon as the first destruction wrought by the conquest was repaired.

In addition to the long continued selection exercised by severe climatic conditions and the consequent elimination of ineffectives, both of which affects a race, there is another force at work which concerns the individual as well. The energy developed in the north is not lost immediately when transferred to the softer conditions of existence in the Mediterranean and Indian countries. This energy endures for several generations and only dies away slowly as the northern blood becomes diluted and the impulse to strive fades.

The contact of Hellene and Pelasgian caused the blossoming of the ancient civilization of Hellas, just as two thousand years later when the Nordic invaders of Italy had absorbed the science, art and literature of Rome, they produced that splendid century we call the Renaissance.

The chief men of the Cinque Cento and the preceding century were of Nordic blood, largely Gothic and Lombard, which is recognized easily by a close inspection of busts or portraits in northern Italy. Dante, Raphael, Titian, Michael Angelo, Leonardo da Vinci were all of Nordic type, just as in classic times many of the chief men and of the upper classes were Nordic.

Similar expansions of civilization and organization of empire followed the incursion of the Nordic Persians into the land of the round skulled Medes and the introduction of Sanskrit into India by the Nordic Sacæ who conquered that peninsula. These outbursts of progress due to the first contact and mixture of two contrasted races are, however, only transitory and pass with the last lingering trace of Nordic blood.

In India the blood of these Aryan-speaking invaders has been absorbed by the dark Hindu and in the final event only their synthetic speech survives.

The marvellous organization of the Roman state made use of the services of Nordic mercenaries and kept the Western Empire alive for three centuries after the ancient Roman stock had virtually ceased to exist.

The date when the population of the Empire had become predominantly of Mediterranean and Oriental blood, due to the introduction of slaves from the east and the wastage of Italian blood in war, coincides with the establishment of the Empire under Augustus and the last Republican patriots represent the final protest of the old patrician Nordic strain. For the most part they refused to abdicate their right to rule in favor of manumitted slaves and imperial favorites and they fell in battle and sword in hand. The Romans died out but the slaves survived and their descendants form the great majority of the south Italians of to-day.

In the last days of the Republic, Cæsar was the leader of the mob, the Plebs, which by that time had ceased to be of Roman blood. Pompey's party represented the remnants of the old native Roman aristocracy and was defeated at Pharsalia not by Cæsar's plebeian clients but by his Nordic legionaries from Gaul. Cassius and Brutus were the last successors of Pompey and their overthrow at Philippi was the final death blow to the Republican party; with them the native Roman families disappear almost entirely.

The decline of the Romans and for that matter of the native Italians began with the Punic Wars when in addition to the Romans who fell in battle a large portion of the country population of Italy was destroyed by Hannibal. Native Romans suffered greatly in the Social and Servile Wars as well as in the civil conflicts between the factions of Sylla, who led the Patricians, and Marius who represented the Plebs. Bloody proscriptions of the rival parties followed alternately the victory of one side and then of the other and under the tyranny of the Emperors of the first century also the old Roman stock was the greatest sufferer until it practically vanished from the scene.

Voluntary childlessness was the most potent cause of the decline under the Empire and when we read of the abject servility of bearers of proud names in the days of Nero and Caligula, we must remember that they could not rally to their standard followers among the Plebs. They had only the choice of submission or suicide and many chose the latter alternative. The abjectness of the Roman spirit under the Empire is thus to be explained by a change in race.

With the expanding dominion of Rome the native elements of vigor were drawn year after year into the legions and spent their active years in wars or in garrisons, while the slaves and those unfit for military duty stayed home and bred. In the present great war while the native Americans are at the front fighting the aliens and immigrants are allowed to increase without check and the parallel is a close one.

Slaves began to be imported into Italy in numbers in the second century B. C. to work the large plantations—latifundia—of the wealthy Romans. This importation of slaves and the ultimate extension of the Roman citizenship to their manumitted descendants and to inferior races throughout the growing Empire and the losses in internal and foreign wars, ruined the state. In America we find another close parallel in the Civil War and the subsequent granting of citizenship to Negroes and to ever increasing numbers of immigrants of plebeian, servile or Oriental races, who throughout history have shown little capacity to create, organize or even to comprehend Republican institutions.

In Rome, when this change in blood was substantially complete, the state could no longer be operated under Republican forms of government and the Empire arose to take its place. At the beginning the Empire was clothed in the garb of republicanism in deference to such Roman elements as still persisted in the Senate and among the Patricians but ultimately these external forms were discarded and the state became virtually a pure despotism.

The new population understood little and cared less for the institutions of the ancient Republic but they were jealous of their own rights of "Bread and the Circus"—"panem et circenses"—and there began to appear in place of the old Roman religion the mystic rites of Eastern countries so welcome to the plebeian and uneducated soul. The Emperors to please the vulgar erected from time to time new shrines to strange gods utterly unknown to the Romans of the early Republic. In America, also, strange temples, which would have been abhorrent to our Colonial ancestors, are multiplying and our streets and parks are turned over to monuments to foreign "patriots," designed not to please the artistic sense of the passer-by but to gratify the national preference of some alien element in the electorate.

These comments on the change of race in Rome at the beginning of our era are not mere speculation.

An examination of many thousands of Roman columbaria or funeral urns and the names inscribed thereon show quite clearly that as early as the first century of our era eighty to ninety per cent of the urban population of the Roman Empire was of servile extraction and that about seven-eighths of this slave population was drawn from districts within the boundaries of the Empire and very largely from the countries bordering on the eastern Mediterranean. Few names are found which indicate that their bearers came from Gaul or the countries beyond the Alps. These Nordic barbarians were of more use in the legions than as household servants.

At the beginning of the Christian era the entire Levant and countries adjoining it in Asia Minor, Syria and Egypt had been so thoroughly hellenized that many of their inhabitants bore Greek names. It was from these countries and from northern Africa that the slave population of Rome was drawn. Their descendants were the most important element in the Roman melting pot and even to-day form the predominant element in the population of Italy south of the Apennines. When the Nordic barbarians a few centuries later poured in, these Romanized Orientals disappeared temporarily from view under the rule of the vigorous northerners but they have steadily absorbed the latter until the Nordic elements in Italy now are to be found chiefly in the Lombard plains and the region of the Alps.

The Byzantine Empire from much the same causes as the Roman became in its turn gradually less and less European and more and more Oriental until it, too, withered and expired.

Regarded in the light of the facts the fall of Rome ceases to be a mystery. The wonder is that the State lived on after the Romans were extinct and that the Eastern Empire survived so long with an ever fading Greek population. In Rome and in Greece only the language of the dominant race survived.

So entirely had the blood of the Romans vanished in the last days of the Empire that sorry bands of barbarians wandered at will through the desolated provinces. Cæsar and his legions would have made short work of these unorganized banditti but Cæsar's legions were a memory, though one great enough to inspire in the intruders somewhat of awe and desire to imitate. Against invaders, however, brains and brawn are more effective than tradition and culture, however noble these last may be.

Early ascetic Christianity played a large part in this decline of the Roman Empire as it was at the outset the religion of the slave, the meek and the lowly while Stoicism was the religion of the strong men of the time. This bias in favor of the weaker elements greatly interfered with their elimination by natural processes and the fighting force of the Empire was gradually undermined. Christianity was in sharp contrast to the worship of tribal deities which preceded it and it tended then as now to break down class and race distinctions.

The maintenance of such distinctions is absolutely essential to race purity in any community when two or more races live side by side.

Race feeling may be called prejudice by those whose careers are cramped by it but it is a natural antipathy which serves to maintain the purity of type. The unfortunate fact that nearly all species of men interbreed freely leaves us no choice in the matter. Races must be kept apart by artificial devices of this sort or they ultimately amalgamate and in the offspring the more generalized or lower type prevails.

X

THE NORDIC RACE OUTSIDE OF EUROPE

We find few traces of Nordic characters outside of Europe. When Egypt was invaded by the Libyans from the west in 1230 B. C. they were accompanied by "sea peoples," probably the Achæan Greeks. There is some evidence of blondness among the people of the south shore of the Mediterranean down to Greek times and the Tamahu or fair Libyans are constantly mentioned in Egyptian records. The reddish blond or partly blond Berbers found to-day on the northern slopes of the Atlas Mountains may well be their descendants. That this blondness of the Berbers, though small in amount, is of Nordic origin we may with safety assume, but through what channels it came we have no means of knowing. There is no historic invasion of north Africa by Nordics except the Vandal conquests but there seems to be little probability that this small Teutonic tribe left behind any physical trace in the native population.

There seem to have been traces of Nordic blood among the Philistines and still more among the Amorites. Certain references to the size of the sons of Anak and to the fairness of David, whose mother was an Amoritish woman, point vaguely in this direction.

References in Chinese annals to the green eyes of the Wu-suns or to the Hiung-Nu in central Asia are almost the only evidence we have of the Nordic race in contact with the peoples of eastern Asia, though there are statements in ancient Chinese or Mongolian records as to the existence of blond and tall tribes and nations in those parts of northern Asia where Mongols are now found exclusively. We may expect to acquire much new light on this subject during the next few decades.

The so-called blondness of the hairy Ainus of the northern islands of Japan seems to be due to a trace of what might be called Proto-Nordic blood. In hairiness these people are in sharp contrast with their Mongoloid neighbors but this is a generalized character common to the highest and the lowest races of man. The primitive Australoids and the highly specialized Scandinavians are among the most hairy populations in the world. So in the Ainus this somatological peculiarity is merely the retention of a primitive trait. The occasional brown or greenish eye and the sometimes fair complexion of the Ainus are, however, suggestive of Nordic affinities and of an extreme easterly extension of Proto-Nordics at a very early period.

The skull shape of the Ainus is dolichocephalic or mesaticephalic, while the broad cheek bones indicate a Mongolian cross as among the Esquimaux. The Ainus, like many other small, mysterious peoples, are probably merely the remnants of one of the early races that are fast fading into extinction. The division of man into species and subspecies is very ancient and the chief races of the earth are the successful survivors of a long and fierce competition. Many species, subspecies and races have vanished utterly, except for reversional characters occasionally found in the larger races.

The only Nordics in Asia Minor, so far as we know, were the Phrygians who crossed the Hellespont about 1400 B. C. as part of the same migration which brought the Achæans into Greece, the Cimmerians who entered by the same route and also through the Caucasus about 650 B. C. and still later, in 270 B. C., the Gauls who, coming from northern Italy through Thrace, founded Galatia. So far as our present information goes little or no trace of these invasions remains in the existing populations of Anatolia. The expansions of the Persians and the Aryanization of their empire and the conquests of the Nordics east and south of the Caspian-Aral Sea, will be discussed in connection with the spread of Aryan languages.

XI

RACIAL APTITUDES

Such are the three races, the Alpine, the Mediterranean and the Nordic, which enter into the composition of European populations of to-day and in various combinations comprise the great bulk of white men all over the world. These races vary intellectually and morally just as they do physically. Moral, intellectual and spiritual attributes are as persistent as physical characters and are transmitted substantially unchanged from generation to generation. These moral and physical characters are not limited to one race but given traits do occur with more frequency in one race than in another. Each race differs in the relative proportion of what we may term good and bad strains, just as nations do, or, for that matter, sections and classes of the same nation.

In considering skull characters we must remember that, while indicative of independent descent, the size and shape of the head are not closely related to brain power. Aristotle was a Mediterranean if we may trust the authenticity of his busts and had a small, long skull, while Humboldt's large and characteristically Nordic skull was equally dolichocephalic. Socrates and Diogenes were apparently quite un-Greek and represent remnants of some early race, perhaps of Paleolithic man. The history of their lives indicates that each was recognized by his fellow countrymen as in some degree alien, just as the Jews apparently regarded Christ as, in some indefinite way, non-Jewish.

Mental, spiritual and moral traits are closely associated with the physical distinctions among the different European races, although like somatological characters, these spiritual attributes have in many cases gone astray. Enough remain, however, to show that certain races have special aptitudes for certain pursuits.

The Alpine race is always and everywhere a race of peasants, an agricultural and never a maritime race. In fact they only extend to salt water at the head of the Adriatic and, like all purely agricultural communities throughout Europe, tend toward democracy, although they are submissive to authority both political and religious being usually Roman Catholics in western Europe. This race is essentially of the soil and in towns the type is mediocre and bourgeois.

The coastal and seafaring populations of northern Europe are everywhere Nordic as far as the shores of Spain and among Europeans this race is pre-eminently fitted for maritime pursuits. Enterprise at sea during the Middle Ages was in the hands of Mediterraneans just as it was originally developed by Cretans, Phœnicians and Carthaginians but after the Reformation the Nordics seized and occupied this field almost exclusively.

The Nordics are, all over the world, a race of soldiers, sailors, adventurers and explorers, but above all, of rulers, organizers and aristocrats in sharp contrast to the essentially peasant and democratic character of the Alpines. The Nordic race is domineering, individualistic, self-reliant and jealous of their personal freedom both in political and religious systems and as a result they are usually Protestants. Chivalry and knighthood and their still surviving but greatly impaired counterparts are peculiarly Nordic traits, and feudalism, class distinctions and race pride among Europeans are traceable for the most part to the north.

The social status of woman varies largely with race but here religion plays a part. In the Roman Republic and in ancient Germany women were held in high esteem. In the Nordic countries of to-day women's rights have received much more recognition than among the southern nations with their traditions of Latin culture. To this general statement modern Germany is a marked exception. The contrast is great between the mental attitude toward woman of the ancient Teutons and that of the modern Germans.

The pure Nordic peoples are characterized by a greater stability and steadiness than are mixed peoples such as the Irish, the ancient Gauls and the Athenians among all of whom the lack of these qualities was balanced by a correspondingly greater versatility.

The mental characteristics of the Mediterranean race are well known and this race, while inferior in bodily stamina to both the Nordic and the Alpine, is probably the superior of both, certainly of the Alpines, in intellectual attainments. In the field of art its superiority to both the other European races is unquestioned, although in literature and in scientific research and discovery the Nordics far excel it.

Before leaving this interesting subject of the correlation of spiritual and moral traits with physical characters we may note that these influences are so deeply rooted in everyday consciousness that the modern novelist or playwright does not fail to make his hero a tall, blond, honest and somewhat stupid youth and his villain a small, dark and exceptionally intelligent individual of warped moral character. So in Celtic legend as in the Græco-Roman and mediæval romances, prince and princess are always fair, a fact rather indicating that the mass of the people were brunet at the time when the legends were taking shape. In fact, "fair" is a synonym for beauty. Most ancient tapestries show a blond earl on horseback and a dark haired churl holding the bridle.

The gods of Olympus were almost all described as blond, and it would be difficult to imagine a Greek artist painting a brunet Venus. In church pictures all angels are blond, while the denizens of the lower regions revel in deep brunetness. "Non Angli sed angeli," remarked Pope Gregory when he first saw Saxon children exposed for sale in the Roman slave-mart.

In depicting the crucifixion no artist hesitates to make the two thieves brunet in contrast to the blond Saviour. This is something more than a convention, as such quasi-authentic traditions as we have of our Lord strongly suggest his Nordic, possibly Greek, physical and moral attributes.

These and similar traditions clearly point to the relations of the one race to the other in classic, mediæval and modern times. How far they may be modified by democratic institutions and the rule of the majority remains to be seen.

The wars of the past two thousand years in Europe have been almost exclusively wars between the various nations of this race or between rulers of Nordic blood.

From a race point of view the present European conflict is essentially a civil war and nearly all the officers and a large proportion of the men on both sides are members of this race. It is the same old tragedy of mutual butchery and mutual destruction between Nordics, just as the Nordic nobility of Renaissance Italy seems to have been possessed with a blood mania to murder one another. It is the modern edition of the old Berserker blood rage and is class suicide on a gigantic scale.

At the beginning of the war it was difficult to say on which side there was the preponderance of Nordic blood. Flanders and northern France are more Nordic than south Germany, while the backbone of the armies that England put into the field as well as of those of her colonies was almost purely Nordic and a large proportion of the Russian army was of the same race. As heretofore stated, with America in the war, the greater part of the Nordics of the world are fighting against Germany.

Although the writer has limited carefully the use of the word "Teutonic" to that section of the Nordic race which originated in Scandinavia and which later spread over northern Europe, nevertheless this term is unfortunate because it is currently given a national and not a racial meaning and is used to denote the populations of the central empires. This popular use includes millions who are un-Teutonic and excludes millions of pure Teutonic blood who are outside of the political borders of Austria and Germany and who are bitterly hostile to the very name itself.

The present inhabitants of the German Empire, to say nothing of Austria, are only to a limited extent descendants of the ancient Teutonic tribes, being very largely Alpines, especially in the east and south. To abandon to the Germans and Austrians the exclusive right to the name Teuton or Teutonic would be to acquiesce in one of their most grandiose pretensions.

XII

ARYA

HAVING shown the existence in Europe of three distinct subspecies of man and a single predominant group of languages called the Aryan or synthetic group, it remains to inquire to which of the three races can be assigned the honor of inventing, elaborating and introducing this most highly developed form of human speech. Our investigations will show that the facts point indubitably to an original unity between the Nordic or rather the Proto-Nordic race and the Proto-Aryan language or the generalized, ancestral, Aryan mother tongue.

Of the three claimants to the honor of being the original creator of the Aryan group of languages, we can at once dismiss the Mediterranean race. The members of this subspecies on the south shores of the Mediterranean, the Berbers and the Egyptians, and many peoples in western Asia speak now and have always spoken Anaryan tongues. We also know that the speech of the original Pelasgians was not Aryan, that in Crete remnants of Pre-Aryan speech persisted until about 500 B. C. and that the Hellenic language was introduced into Ægean countries from the north. In Italy the Etruscan in the north and the Messapian in the south were Anaryan languages and the ancestral form of Latin speech in the guise of Umbrian and Oscan came through the Alps from the countries beyond.

In Spain a Celtic language was introduced from the north about 500 B. C. but with so little force behind it that it was unable to replace entirely the Anaryan Basque language of at least a portion of the aborigines.

In Britain, Aryan speech was introduced about 800 B. C. and in France somewhat earlier. In central and northern Europe no certain trace of the Anaryan languages at one time spoken there persists, except among the Lapps and in the neighborhood of the Gulf of Finland, where Non-Aryan Finnic dialects are spoken to-day by the Finlanders and the Esthonians.

We thus know the approximate dates of the introduction of Aryan speech into western and southern Europe and that it came in through the medium of the Nordic race.

In Spain and in the adjoining parts of France nearly half a million people continue to speak an agglutinative language, called Basque or Euskarian. In skull shape these Basques correspond closely with the Aryan-speaking populations around them, being dolichocephalic in Spain and brachycephalic or pseudo-brachycephalic in France. In the case of both the long skulled and the round skulled Basques the lower part of the face is long and thin, with a peculiar and pointed chin and among the French Basques the skull is broadened in the temporal region. In other words, their faces show certain secondary racial characters which have been imposed by selection upon a people composed originally of two races of independent origin, but long isolated by the limitations of language.

The Euskarian language is believed to have been related to the ancient Iberian but has affinities which point to Asia as its place of origin and make possible the hypothesis that it may have been derived from the ancient language of the Proto-Alpines in the west.

The problem of the extinct Ligurian language must be considered in this connection. It seems to have been Anaryan, but we do not know whether it was the speech originally of Alpines or of Mediterraneans either of whom could be reasonably considered as a claimant.

Other than the Basque language there are in western Europe but few remains of Pre-Aryan speech, and these are found chiefly in place names and in a few obscure words.

Remnants of Anaryan speech exist here and there throughout European Russia, but many of them can be traced to historic invasions. Until we reach the main body of Ural-Altaic speech in the east of Russia, the Esthonians, with kindred tribes of Livonians and Tchouds, and the Finns are the only peoples who speak Non-Aryan tongues, but the physical type with the exception of the skull shape of all these tribes is distinctly Nordic. In this connection the Lapps and related groups in the far north can be disregarded.

The problem of the Finns is a difficult one. The coast of Finland, of course, is purely Swedish, but the great bulk of the population in the interior is brachycephalic, though otherwise thoroughly Nordic in type.

The Anaryan Finnish, Esthonian and Livonian languages were probably introduced at the same time as were round skulls into Finland. The shores of the Gulf of Finland were originally inhabited by Nordics and the intrusion of round skulled Finns probably came soon after the Christian era. This immigration and that of the Livonians and Esthonians may possibly have been part of the same movement which brought the Alpine Wends into eastern Germany. The earliest references to the Finns that we have locate them in central Russia.

The most important Anaryan language in Europe is the Magyar of Hungary, but this we know was introduced from the eastward at the end of the ninth century, as was the earlier but now extinct Avar.

In the Balkans the language of the Turks has never been a vernacular as it is in Asia Minor. In Europe it was spoken only by the soldiers and the civil administrators and by very sparse colonies of Turkish settlers. The mania of the Turks for white women, which is said to have been one of the motives that led to the conquest of the Byzantine Empire, has unconsciously resulted in the obliteration of the Mongoloid type of the original Asiatic invaders. Persistent crossing with Circassian and Georgian women, as well as with slaves of every race in Asia Minor and in Europe with whom they came in contact, has made the European Turk of to-day indistinguishable in physical characters from his Christian neighbors. At the same time, polygamy has greatly strengthened the hold of the dominant Turk. In fact, among the upper classes of the higher races monogamy and the resultant limitation in number of offspring has been a source of weakness from the viewpoint of race expansion. The Turks of Seljukian and Osmanli origin were never numerous and the Sultan's armies were largely composed of Islamized Anatolians and Europeans.

In Persia and India, also, the Aryan languages were introduced from the north at known periods, so in view of all these facts the Mediterranean race cannot claim the honor of either the invention or dissemination of the synthetic languages.

The chief claim of the Alpine race of central Europe and western Asia to the invention and introduction into Europe of the Proto-Aryan form of speech rests on the fact that nearly all the members of this race in Europe speak well developed Aryan languages, chiefly in some form of Slavic. This fact taken by itself may have no more significance than the fact that the Mediterranean race in Spain, Italy and France speaks Romance languages, but it is, nevertheless, an argument of some weight.

Outside of Europe the Armenians and other Armenoid brachycephalic peoples of Asia Minor and the Iranian Highlands, all of Alpine race, together with a few isolated tribes of the Caucasus, speak Aryan languages and these peoples lie on the highroad along which knowledge of the metals and other cultural developments entered Europe.

If the Aryan language were invented and developed by these Armenoid Alpines we should be obliged to assume that they introduced it along with bronze culture into Europe about 3000 B. C. and taught the Nordics both their language and their metal culture. There are, however, in western Asia many Alpine peoples who do not speak Aryan languages and yet are Alpine in type, such as the Turcomans and in Asia Minor the so-called Turks are also largely Islamized Alpines of the Armenoid subspecies who speak Turki. There is no trace of Aryan speech south of the Caucasus until after 1700 B. C. and the Hittite language spoken before that date in central and eastern Asia Minor, although not yet clearly deciphered, was Anaryan to the best of our present knowledge. The Hittites themselves were probably ancestral to the living Armenians.

We are sufficiently acquainted with the languages of the ancient Mesopotamian countries to know that the speech of Accad and Sumer, of Susa and Media was agglutinative and that the languages of Assyria and of Palestine were Semitic. The speech of the Kassites was Anaryan, but they seem to have been in contact with the horse-using Nordics and some of their leaders bore Aryan names. The language of the shortlived empire of the Mitanni in the foothills south of Armenia is the only one about the character of which there can be serious doubt. There is, therefore, much negative evidence against the existence of Aryan speech in that part of the world earlier than its known introduction by Nordics.

If, then, the last great expansion into Europe of the Alpine race brought from Asia the Aryan mother tongue, as well as the knowledge of metals, we must assume that all the members of the Nordic race thereupon adopted synthetic speech from the Alpines.

We know that these Alpines reached Britain about 1800 B. C. and probably they had previously occupied much of Gaul, so that if they are to be credited with the introduction of the synthetic languages into western Europe, it is difficult to understand why we have no known trace of any form of Aryan speech in central Europe or west of the Rhine prior to 1000 B. C. while we have some, though scanty, evidence of Non-Aryan languages.

It may be said in favor of this claim of the Alpine race to be the original inventor of synthetic speech, that language is ever a measure of culture and the higher forms of civilization are greatly hampered by the limitations of speech imposed by the less highly evolved languages, namely, the monosyllabic and the agglutinative, which include nearly all the Non-Aryan languages of the world. It does not seem probable that barbarians, however fine in physical type and however well endowed with the potentiality of intellectual and moral development, dwelling as hunters in the bleak and barren north along the edge of the retreating glaciers and as nomad shepherds in the Russian grasslands, could have evolved a more complicated and higher form of articulate speech than the inhabitants of southwestern Asia, who many thousand years earlier were highly civilized and are known to have invented the arts of agriculture, metal working and domestication of animals, as well as of writing and pottery. Nevertheless, such seems to be the fact.

To summarize, it appears that a study of the Mediterranean race shows that so far from being purely European, it is equally African and Asiatic and that in the narrow coastal fringe of southern Persia, in India and even farther east the last strains of this race gradually fade into the Negroids through prolonged cross breeding. A similar inquiry into the origin and distribution of the Alpine subspecies shows clearly the fundamentally Asiatic origin of the type and that on its easternmost borders in central Asia it marches with the round skulled Mongols, and that neither the one nor the other was the inventor of Aryan speech.

XIII

ORIGIN OF THE ARYAN LANGUAGES

By the process of elimination set forth in the preceding chapter we are compelled to acknowledge that the strongest claimant for the honor of being the race of the original Aryans, is the tall, blond Nordic. An analysis of the various languages of the Aryan group reveals an extreme diversity which can be best explained by the hypothesis that the existing languages are now spoken by people upon whom Aryan speech has been forced from without. This theory corresponds exactly with the known historic fact that the Aryan languages, during the last three or four thousand years at least have, again and again, been imposed by Nordics upon populations of Alpine and Mediterranean blood.

Within the present distributional area of the Nordic race on the Gulf of Riga and in the very middle of a typical area of isolation, are the most generalized members of the Aryan group, namely Lettish and Lithuanian, both almost Proto-Aryan in character. Close at hand existed the closely related Old Prussian or Borussian, very recently extinct. These archaic languages are relatively close to Sanskrit and exist in actual contact with the Anaryan speech of the Esthonians and Finns.

The Anaryan languages in eastern Russia are Ugrian, a form of speech which extends far into Asia and which appears to contain elements which unite it with synthetic speech and may be dimly transitory in character. In the opinion of many philologists, a primitive form of Ugrian might have given birth to the Proto-Aryan ancestor of existing synthetic languages.

This hypothesis, if sustained by further study, will provide additional evidence that the site of the development of the Aryan languages and of the Nordic subspecies was in eastern Europe, in a region which is close to the meeting place between the most archaic synthetic languages and the most nearly related Anaryan tongue, the agglutinative Ugrian.

The Aryan tongue was introduced into Greece by the Achæans about 1400 B. C. and later, about 1100 B. C. by the true Hellenes, who brought in the classic dialects of Dorian, Ionian and Æolian.

These Aryan languages superseded their Anaryan predecessor, the Pelasgian. From the language of these early invaders came the Illyrian, Thracian, Albanian, classic Greek and the debased modern Romaic, a descendant of the Ionian dialect.

Aryan speech was introduced among the Anaryan-speaking Etruscans of the Italian Peninsula by the Umbrians and Oscans about 1100 B. C. and from the language of these conquerors was derived Latin which later spread to the uttermost confines of the Roman Empire. Its descendants to-day are the Romance tongues spoken within the ancient imperial boundaries, Portuguese on the west, Castilian, Catalan, Provençal, French, the Langue d'oïl of the Walloons, Romansch, Ladin, Friulian, Tuscan, Calabrian and Rumanian.

The problem of the existence of a language clearly descended from Latin, the Rumanian, in the eastern Carpathians cut off by Slavic and Magyar tongues from the nearest Romance tongues presents difficulties. The Rumanians themselves make two claims; the first, which can be safely disregarded, is an unbroken linguistic descent from a group of Aryan languages which occupied this whole section of Europe, from which Latin was derived and of which Albanian is also a remnant.

The more serious claim, however, made by the Rumanians is to linguistic and racial descent from the military colonists planted by the Emperor Trajan in the great Dacian plain north of the Danube. This may be possible, so far as the language is concerned, but there are some weighty objections to it.

We have little evidence for, and much against, the existence of Rumanian speech north of the Danube for nearly a thousand years after Rome abandoned this outlying region. Dacia was one of the last provinces to be occupied by Rome and was the first from which the legions were withdrawn upon the decline of the Empire. The northern Carpathians, furthermore, where the Rumanians claim to have taken refuge during the barbarian invasions formed part of the Slavic homeland and it was in these same mountains and in the Ruthenian districts of eastern Galicia that the Slavic languages were developed, probably by the Sarmatians and Venethi, from whence they spread in all directions in the centuries that immediately followed the fall of Rome. So it is almost impossible to credit the survival of a frontier community of Romanized natives situated not only in the path of the great invasions of Europe from the east, but also in the very spot where Slavic tongues were at the time evolving.

Rumanian speech occupies large areas outside of the present kingdom of Rumania, in Russian Bessarabia, Austrian Bukowina and above all in Hungarian Transylvania.

The linguistic problem is further complicated by the existence in the Pindus Mountains of Thessaly of another large community of Vlachs of Rumanian speech. How this later community could have survived from Roman times until to-day, untouched either by the Greek language of the Byzantine Empire or by the Turkish conquest is another difficult problem.

The evidence, on the whole, points to the descent of the Vlachs from the early inhabitants of Thrace, who adopted Latin speech in the first centuries of the Christian era and clung to it during the domination of the Bulgarians from the seventh century onward in the lands south of the Danube. In the thirteenth century the mass of these Vlachs, leaving scattered remnants behind them, crossed the Danube and founded Little and Great Wallachia. From there they spread into Transylvania and a century later into Moldavia.

The solution of this problem receives no assistance from anthropology, as these Rumanian-speaking populations both on the Danube and in the Pindus Mountains in no way differ physically from their neighbors on all sides. But through whatever channel they acquired their Latin speech the Rumanians of to-day can lay no valid claim to blood descent even in a remote degree from the true Romans.

The first Aryan languages known in western Europe were the Celtic group which first appears west of the Rhine about 1000 B. C.

Only a few dim traces of Pre-Aryan speech have been found in the British Isles, and these largely in place names. The Pre-Aryan language of the

Pre-Nordic population of Britain may have survived down to historic times as Pictish.

In Britain, Celtic speech was introduced in two successive waves, first by the Goidels or "Q" Celts, who apparently appeared about 800 B. C. and this form exists to this day as Erse in western Ireland, as Manx of the Isle of Man and as Gaelic in the Scottish Highlands.

The Goidels were still in a state of bronze culture. When they reached Britain they must have found there a population preponderantly of Mediterranean type with numerous remains of still earlier races of Paleolithic times and also some round skulled Alpines of the Round Barrows, who have since largely faded from the living population. When the next invasion, the Cymric or Brythonic, occurred the Goidels had been absorbed very largely by the underlying Mediterranean aborigines who had meanwhile accepted the Goidelic form of Celtic speech, just as on the continent the Gauls had mixed with Alpine and Mediterranean natives and had imposed upon the conquered their own tongue. In fact, in Britain, Gaul and Spain the Goidels and Gauls were chiefly a ruling, military class, while the great bulk of the population remained unchanged although Aryanized in speech.

These Brythonic or Cymric tribes or "P" Celts followed the "Q" Celts four or five hundred years later, and drove the Goidels westward through Germany, Gaul and Britain and this movement of population was still going on when Cæsar crossed the Channel. The Brythonic group gave rise to the modern Cornish, extinct within a century, the Cymric of Wales and the Armorican of Brittany.

In central Europe we find traces of these same two forms of Celtic speech with the Goidelic everywhere the older and the Cymric the more recent arrival. The cleavage between the dialects of the "Q" Celts and the "P" Celts was probably less marked two thousand years ago than at present, since in their modern form they are both Neo-Celtic languages. What vestiges of Celtic languages remain in France belong to Brythonic. Celtic was not generally spoken in Aquitaine in Cæsar's time.

When the two Celtic-speaking races came into conflict in Britain their original relationship had been greatly obscured by the crossing of the Goidels with the underlying dark Mediterranean race of Neolithic culture and by the mixture of the Belgæ with Teutonic tribes. The result was that the Brythons did not distinguish between the blond Goidels and the brunet but Celticized Mediterraneans as they all spoke Goidelic dialects.

In the same way when the Saxons and the Angles entered Britain they found there a population speaking Celtic of some form, either Goidelic or Cymric and promptly called them all Welsh (foreigners). These Welsh were preponderantly of

Mediterranean type with some mixture of a blond Goidel strain and a much stronger blond strain of Cymric origin and these same elements exist to-day in England. The Mediterranean race is easily distinguished, but the physical types derived from Goidel and Brython alike are merged and lost in the later floods of pure Nordic blood, Angle, Saxon, Dane, Norse and Norman. In this primitive, dark population with successive layers of blond Nordics imposed upon it, each one more purely Nordic and in the relative absence of round heads lie the secret and the solution of the anthropology of the British Isles. This Iberian substratum was able to absorb to a large extent the earlier Celtic-speaking invaders, both Goidels and Brythons, but it is only just beginning to seriously threaten the later Nordics and to reassert its ancient brunet characters after three thousand years of submergence.

In northwest Scotland there is a Gaelic-speaking area where the place names are all Scandinavian and the physical types purely Nordic. This is the only spot in the British Isles where Celtic speech has reconquered a district from the Teutonic languages and it was the site of one of the conquests of the Norse Vikings, probably in the early centuries of the Christian era. In Caithness in north Scotland, as well as in some isolated spots on the Irish coasts, the language of these same Norse pirates persisted within a century. In the fifth century of our era and after the break-up of Roman domination in Britain there was much racial unrest and a back wave of Goidels crossed from Ireland and either reintroduced or reinforced the Gaelic speech in the highlands. Later, Goidelic speech was gradually driven northward and westward by the intrusive English of the lowlands and was ultimately forced over this originally Norse-speaking area. We have elsewhere in Europe evidence of similar shiftings of speech without any corresponding change in the blood of the population.

Except in the British Isles and in Brittany Celtic languages have left no modern descendants, but have everywhere been replaced by languages of Neo-Latin or of Teutonic origin. Outside of Brittany one of the last, if not quite the last, reference to Celtic speech in Gaul is the historic statement that "Celtic" tribes, as well as "Armoricans," took part at Châlons in the great victory in 451 A. D. over Attila the Hun and his confederacy of subject nations.

On the continent the only existing populations of Celtic speech are the primitive inhabitants of central Brittany, a population noted for their religious fanaticism and for other characteristics of a backward people. This Celtic speech is claimed to have been introduced about 450–500 A. D. by

Britons fleeing from the Saxons. These refugees, if there were any substantial number of them, must have been dolichocephs of either Mediterranean or Nordic race or both. We are asked by this tradition to believe that their long skull was lost, but that their language was adopted by the round skulled Alpine population of Armorica. It is much more probable that the Cymric-speaking Alpines of Brittany have merely retained in this isolated corner of France a form of Celtic speech which was prevalent throughout northern Gaul and Britain before these provinces were conquered by Rome and Latinized and which, perhaps, was reinforced later by British Cymry. Cæsar remarked that there was little difference between the speech of the Belgæ in northern Gaul and in Britain. In both cases the speech was Cymric.

Long after the conquest of Gaul by the Goths and Franks Teutonic speech remained predominant among the ruling classes and, by the time it succumbed to the Latin tongue of the Romanized natives, the old Celtic languages had been entirely forgotten outside of Brittany.

An example of similar changes of language is to be found in Normandy where the country was inhabited by the Nordic Belgæ speaking a Cymric language before that tongue was replaced by Latin. This coast was ravaged about 300 or 400 A. D. by Saxons who formed settlements along both sides of the Channel and the coasts of Brittany which were later known as the Litus Saxonicum. Their progress can best be traced by place names as our historic record of these raids is scanty.

The Normans landed in Normandy in the year 911 A. D. They were heathen, Danish barbarians, speaking a Teutonic tongue. The religion, culture and language of the old Romanized populations worked a miracle in the transformation of everything except blood in one short century. So quick was the change that 155 years later the descendants of the same Normans landed in England as Christian Frenchmen armed with all the culture of their period. The change was startling, but the Norman blood remained unchanged and entered England as a substantially Nordic type.

XIV

THE ARYAN LANGUAGE IN ASIA

In the Ægean region and south of the Caucasus Nordics appear after 1700 B. C. but there were unquestionably invasions and raids from the north for many centuries previous to our first records. These early migrations were probably not in sufficient force to modify the blood of the autochthonous races or to substitute Aryan languages for the ancient Mediterranean and Asiatic tongues.

These men of the North came from the grass-lands of Russia in successive waves and among the first of whom we have fairly clear knowledge were the Achæans and Phrygians. Aryan names are mentioned in the dim chronicles of the Mesopotamian empires about 1700 B. C. among the Kassites and later, Mitanni. Aryan names of prisoners captured beyond the mountains in the north and of Aryan deities before whom oaths were taken are recorded about 1400 B. C. but one of the first definite accounts of Nordics south of the Caucasus describes the presence of Nordic Persians at Lake Urmia about 900 B. C. There were many incursions from that time on, the Cimmerians raiding across the Caucasus as early as 650 B. C. and shortly afterward overrunning all Asia Minor.

The easterly extension of the Russian steppes or Kiptchak north of the Caspian-Aral Sea in Turkestan as far as the foothills of the Pamirs was occupied by the Sacæ or Massagetæ, who were also Nordics and akin to the Cimmerians and Persians, as were, perhaps, the Ephtalites or White Huns in Sogdiana north of Persia, destroyed by the Turks in the sixth century.

For several centuries groups of Nordics drifted as nomad shepherds across the Caucasus into the empire of the Medes, introducing little by little the Aryan tongue which later developed into Old Persian. By 550 B. C. these Persians had become sufficiently numerous to overthrow their rulers and under the leadership of the great Cyrus they organized the Persian Empire, one of the most enduring of Oriental states. The base of the population of the Persian Empire rested on the round skulled Medes who belonged to the Armenoid subdivision of the Alpines. Under the leadership of their priestly caste of Magi these Medes rebelled again and again against their Nordic masters before the two peoples became fused.

From 525 to 485 B. C. during the reign of Darius, whose sculptured portraits show a man of pure Nordic type, the tall, blond Persians had become almost exclusively a class of great ruling nobles and had forgotten the simplicity of their shepherd ancestors. Their language belonged to the Eastern or Iranian division of Aryan speech and was known as Old Persian, which continued to be spoken until the fourth century before the Christian era. From it were derived Pehlevi, or Parthian as well as modern Persian. The great book of the old Persians, the Avesta, which was written in Zendic, also an Iranian language, does not go back to the reign of Darius and was remodelled after the Christian era, but the Old Persian of Darius was closely related to the Zendic of Bactria and to the Sanskrit of Hindustan. From Zendic, also called Medic, are derived Ghalcha, Balochi, Kurdish and other dialects.

The rise to imperial power of the dolichocephalic Aryan-speaking Persians was largely due to the genius of their leaders but the Aryanization of western Asia by them is one of the most amazing events in history. The whole region became completely transformed so far as the acceptance by the conquered of the language and religion of the Persians was concerned, but the blood of the Nordic race quickly became diluted and a few centuries later disappears from history.

During the great wars with Greece the pure Persian blood was still unimpaired and in control. In the literature of the time there is little evidence of race antagonism between the Greek and the Persian leaders although their rival cultures were sharply contrasted. In the time of Alexander the Great the pure Persian blood was obviously confined to the nobles and it was the policy of Alexander to Hellenize the Persians and to amalgamate his Greeks with them. The amount of pure Macedonian blood was not sufficient to reinforce the Nordic strain of the Persians and the net result was the entire loss of the Greek stock.

It is a question whether the Armenians of Asia Minor derived their Aryan speech from this invasion of the Nordic Persians, or whether they received it at an earlier date from the Phrygians and from the west. These Phrygians entered Asia Minor by way of the Dardanelles and broke up the Hittite Empire. Their language was Aryan and probably was related to Thracian. In favor of the theory of the introduction of the Armenian language by the Phrygians from the west, rather than by the Persians from the east, is the highly significant fact that the basic structure of that tongue shows its relationship to be with the western or Centum rather than with the eastern or Satem group of Aryan languages and this, too, in spite of a very large Persian vocabulary.

The Armenians themselves, like all the other natives of the plateaux and highlands as far east as the Hindu Kush Mountains, while of Aryan speech, are of the Armenoid subdivision, in sharp contrast to the predominant types south of the mountains in Persia, Afghanistan and Hindustan, all of which are dolichocephalic and of Mediterranean affinity but generally betraying traces of admixture with still more ancient races of Negroid origin, especially in India.

We now come to the last and easternmost extension of Aryan languages in Asia. As mentioned above, the grasslands and steppes of Russia extend north of the Caucasus Mountains and the Caspian Sea to ancient Bactria, now Turkestan. This whole country was occupied by the Nordic Sacæ and the closely related Massagetæ. These Sacæ may be identical with the later Scythians.

Soon after the opening of the second millennium B. C. and perhaps even earlier, the first Nordics crossed over the Afghan passes, entered the plains of India and organized a state in the Punjab, "the land of the five rivers," bringing with them Aryan speech to a population probably of Mediterranean type and represented to-day by the Dravidians. The Nordic Sacæ arrived later in India and introduced the Vedas, religious poems, which were at first transmitted orally but which were reduced to written form in Old Sanskrit by the Brahmans at the comparatively late date of 300 A. D. From this classic Sanskrit are derived all the modern Aryan languages of Hindustan, as well as the

Singalese of Ceylon and the chief dialects of Assam.

There is great diversity among scholars as to the date of the first entry of these Aryan-speaking tribes into the Punjab but the consensus of opinion seems to indicate a period between 1600 and 1700 B. C. or even somewhat earlier. However, the very close affinity of Sanskrit to the Old Persian of Darius and to the Zendavesta would strongly indicate that the final introduction of Aryan languages in the form of Sanskrit occurred at a much later time. The most recent tendency is to bring these dates somewhat forward.

If close relationship between languages indicates correlation in time then the entry of the Sacæ into India would appear to have been nearly simultaneous with the crossing of the Caucasus by the Nordic Cimmerians and their Persian successors.

The relationship between the Zendavesta and the Sanskrit Vedas is as near as that between High and Low German and consequently such close affinity prevents our thrusting back the date of the separation of the Persians and the Sacæ more than a few centuries.

A simultaneous migration of nomad shepherds on both sides of the Caspian-Aral Sea would naturally occur in a general movement southward and such migrations may have taken place several times. In all probability these Nordic invasions occurred one after another for a thousand years or more, the later ones obscuring and blurring the memory of their predecessors.

When shepherd tribes leave their grasslands and attack their agricultural neighbors, the reason is nearly always a famine due to prolonged drought and causes such as these have again and again in history put the nomad tribes in motion over large areas. During many centuries fresh tribes composed of Nordics or under the leadership of Nordics but all Aryan-speaking, poured over the Afghan passes from the northwest and pushed before them the earlier arrivals. Clear traces of these successive floods of conquerors are to be found in the Vedas themselves.

The Zendic form of the Iranian group of Aryan languages was spoken by those Sacæ who remained in old Bactria and from it is derived a whole group of closely related dialects still used in the Pamirs of which Ghalcha is the best known.

The Sacæ and Massagetæ were, like the Persians, tall, blond dolichocephs and they have left behind them dim traces of their blood among the living Mongolized nomads of Turkestan, the Kirghizes. Ancient Bactria maintained its Nordic and Aryan aspect long after Alexander's time and did not become Mongolized and receive the sinister name of Turkestan until the seventh century, when it was the first victim of the series of ferocious invasions from the north and east, which under various Mongol leaders destroyed civilization in Asia and threatened its existence in Europe. These conquests culminated in 1241 A. D. at Wahlstatt in Silesia where the Germans, though themselves badly defeated, put a final limit to this westward rush of Asiatics.

The Sacæ were the most easterly members of the Nordic race of whom we have definite record. The Chinese knew well these "green eyed devils," whom they called by their Tatar name, the "Wu-suns,"—the tall ones—and with whom they came into contact about 200 B. C. in what is now Chinese Turkestan. Other Nordic tribes are recorded in this region. Evidence is accumulating that central Asia had a large Nordic population in the centuries preceding the Christian era. The discovery of the Aryan Tokharian language in Chinese Turkestan considered in connection with other facts indicates intensive occupation by Nordics of territories in central Asia now wholly Mongol, just as in Europe dark-haired Alpines occupy large territories where in Roman times fair haired Nordics were preponderant. In short we find both in Europe and in western and central Asia the same record of Nordic decline during the last two thousand years and their replacement by races of inferior value and civilization.

This Tokharian is undoubtedly a pure Aryan language related, curiously enough, to the western group rather than to the Indo-Iranian. It has been deciphered from inscriptions recently found in northeast Turkestan and was a living language prior to the ninth century A. D.

Of all the wonderful conquests of the Sacæ there remain as evidence of their invasions only these Indian and Afghan languages. Dim traces of their blood have been found in the Pamirs and in Afghanistan, but in the south their blond traits have vanished, even from the Punjab. It may be that the stature of some of the Afghan hill tribes and of the Sikhs and some of the facial characters of the latter are derived from this source, but all blondness of skin, hair or eye of the original Sacæ has utterly vanished.

The long skulls all through India are to be attributed to the Mediterranean race rather than to this Nordic invasion, while the Pre-Dravidians and Negroids of south India, with which the former are largely mixed, are also dolichocephs.

In short, the introduction in Iran and India of Aryan languages, Iranian, Ghalchic and Sanskrit, represents a linguistic and not an ethnic conquest.

In concluding this revision of the racial foundations upon which the history of Europe has been based it is scarcely necessary to point out that the actual results of the spectacular conquests and invasions of history have been far less permanent than those of the more insidious victories arising from the crossing of two diverse races and that in such mixtures the relative prepotency of the various human subspecies in Europe appears to be in inverse ratio to their social value.

The continuity of physical traits and the limitation of the effects of environment to the individual only are now so thoroughly recognized by scientists that it is at most a question of time when the social consequences which result from such crossings will be generally understood by the public at large. As soon as the true bearing and import of the facts are appreciated by lawmakers a complete change in our political structure will inevitably occur and our present reliance on the influence of education will be superseded by a readjustment based on racial values.

Bearing in mind the extreme antiquity of physical and spiritual characters and the persistency with which they outlive those elements of environment termed language, nationality and forms of government, we must consider the relation of these facts to the development of the race in America. We may be certain that the progress of evolution is in full operation to-day under those laws of nature which control it and that the only sure guide to the future lies in the study of the operation of these laws in the past.

We Americans must realize that the altruistic ideals which have controlled our social development during the past century and the maudlin sentimentalism that has made America "an asylum for the oppressed," are sweeping the nation toward a racial abyss. If the Melting Pot is allowed to boil without control and we continue to follow our national motto and deliberately blind ourselves to all "distinctions of race, creed or color," the type of native American of Colonial descent will become as extinct as the Athenian of the age of Pericles, and the Viking of the days of Rollo.

APPENDIX

The maps shown facing pages 266, 268, 270, and 272 of this book attempt in broad and somewhat hypothetical lines to represent by means of color diagrams the original distribution and the subsequent expansion and migration of the three main European races, the Mediterranean, the Alpine and the Nordic, as outlined in this book.

THE MAXIMUM EXPANSION OF THE ALPINES WITH BRONZE CULTURE, 3000–1800 B. C.

The first map (Pl. I) shows the distribution of these races at the close of the Neolithic, as well as their later expansion. It also indicates the sites of earlier cultures. The distribution of megaliths in Asia Minor on the north coast of Africa and up the Atlantic seaboard through Spain, France and Britain to Scandinavia is set forth. These great stone monuments were seemingly the work of the Mediterranean race using, however, a culture of bronze acquired from the Alpines. The map also shows the sites throughout Russia of the kurgans, or ancient artificial mounds, distribution of which seems to correspond closely with the original habitat of the Nordics.

In southwestern France there is indicated the area where the Cro-Magnon race persisted longest and where traces of it are still to be found. The site is shown of the type station of the latest phase of the Paleolithic known as the Mas d'Azil—a great cavern in the eastern Pyrenees from which that period took its name of Azilian.

At the entrance of the Baltic Sea is also shown the type station of the Maglemose culture which flourished at the close of the Paleolithic and was probably the work of early Nordics.

In the centre of the district occupied by the Alpines is located Robenhausen, the most characteristic of the Neolithic lake dwelling stations and also the Terramara stations in which a culture transitional between the Neolithic and the Bronze existed. In the Tyrol the site is indicated of the village of Hallstatt, which gave its name to the first iron culture.

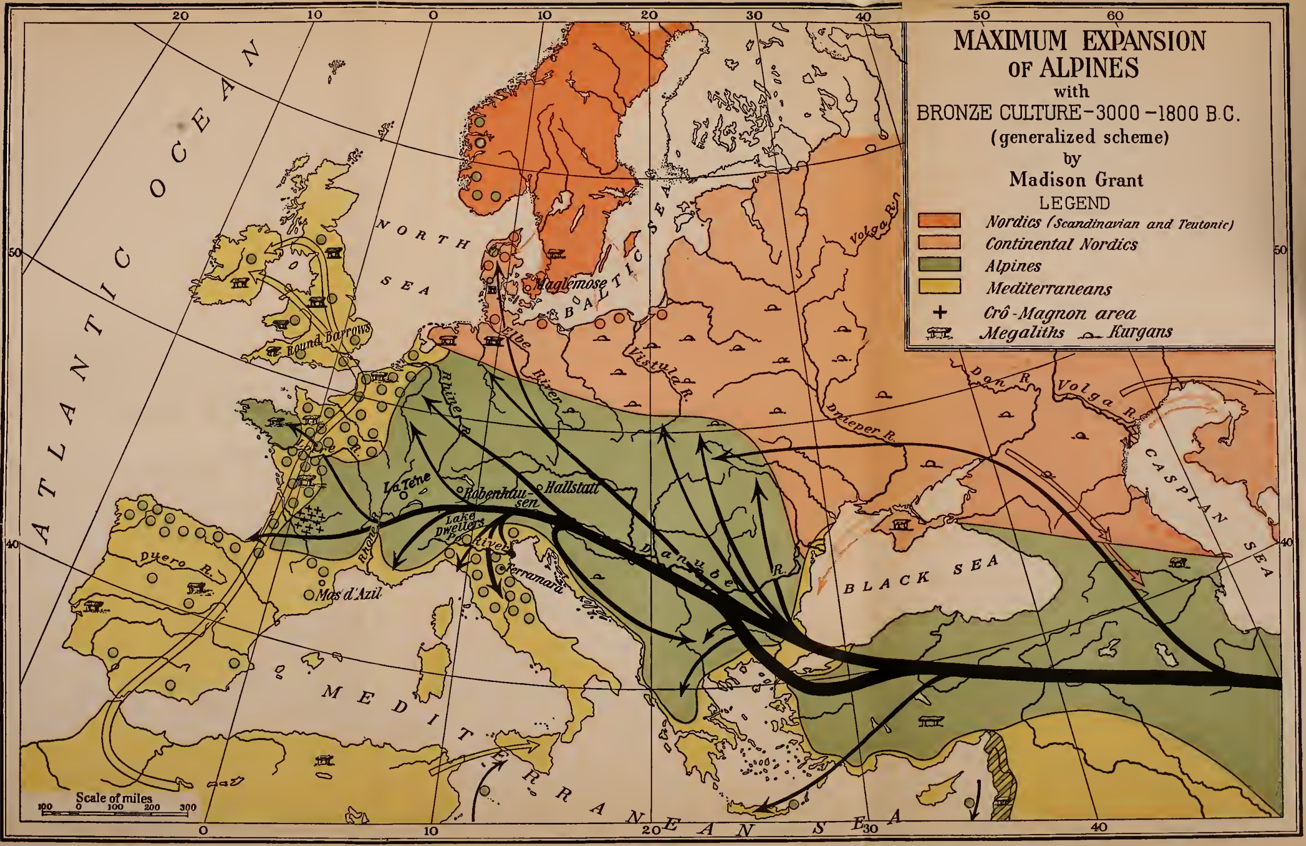
The site of La Tène at the north end of Lake Neuchâtel in Switzerland is also shown. From this village the La Tène Iron Age takes its name.

The difficulty of depicting the shifting of races during twelve centuries is not easily overcome, but the map attempts to show that at the close of the Neolithic all the coast lands of the Mediterranean and of the Atlantic seaboard up to Germany and including the British Isles were populated by the Mediterranean race, in addition, of course, to remnants of earlier Neanderthals and Cro-Magnons, who probably, at that date, still formed an appreciable portion of the population.

The yellow arrows indicate the route of the migrations of Mediterranean man, who appears to have entered Europe from the east along the African littoral. But the main invasions passed up through Spain and Gaul into the British Isles, where from that time to this they have formed the substratum of the population. In the central portion of their range these Mediterraneans were swamped by the Alpines, as shown by the spreading green, while in northern Gaul and Britain the Mediterraneans were submerged afterward by Nordics, as appears on the later maps.

The arrows and routes of migration shown on the yellow area of this map indicate changes which occurred during the Neolithic and perhaps earlier, but the pink and red arrows in the northern and southeastern portions represent migrations which were in full swing and in fact were steadily increasing during the entire period involved. The next map shows these Nordics bursting out of their original homeland in every direction and in their turn conquering Europe.

Between these two races, the Mediterranean and the Nordic, there entered a great intrusion of Alpines, flowing from the highlands of western Asia through Asia Minor and up the valley of the Danube throughout central Europe and



MAXIMUM EXPANSION OF ALPINES with BRONZE CULTURE–3000–1800 B.C. (generalized scheme) by Madison Grant

LEGEND
Nordics (Scandinavian and Teutonic)
Continental Nordics
Alpines
Mediterraneans
+ Crô-Magnon area
Megaliths
Kurgans
ATLANTIC OCEAN
NORTH SEA
BALTIC SEA
BLACK SEA
CASPIAN SEA
MEDITERRANEAN SEA
Maglemose
Round Barrows
Elbe River
Vistula R.
Volga R.
Don R.
Dnieper R.
Rhine R.
Loire R.
Rhone R.
Danube R.
Duero R.
Po River
La Tène
Robenhausen
Hallstatt
Lake Dwellers
Terramara
Mas d'Azil
Scale of miles
100 0 100 200 300
20
10
0
10
20
30
40
50
60
50
40
0
10
20
30
40

thence expanding in every direction. Forerunners of these same Alpines were found in western Europe as far back as the closing Azilian phase of the Paleolithic, where they are known as the Furfooz-Grenelle race and are thus contemporary in western Europe with the earliest Mediterraneans.

During all the Neolithic the Alpines occupied the mountainous core of Europe, but their great and final expansion occurred at the close of the Neolithic and the beginning of the Bronze Period, when a new and extensive Alpine invasion from the region of the Armenian highlands brought in the Bronze culture. This last migration apparently followed the routes of the earlier invasions and, in the extreme southwest, it even reached Spain in small numbers, where its remnants can still be found in the Cantabrian Alps. The Alpines occupied all Savoy and central France, where from that day to this they constitute the bulk of the peasant population. They reached Brittany and to-day that peninsula is their westernmost outpost. They crossed over in small numbers to Britain and some even reached Ireland. In England they were the men of the Round Barrows, but nearly all trace of this invasion has vanished from the living population.

The Alpines also reached Holland, Denmark and southwestern Norway and traces of their colonization in these countries are still found.

The author has attempted to indicate the lines of this Alpine expansion by means of the solid green spreading over central Europe and Asia Minor, with outlying dots showing the outer limits of the invasion. Black arrows proceeding from the east denote its main lines and routes. Those Alpines who crossed the Caucasus passed through southern Russia and a side wave of the same migration passed down the Syrian coast to Egypt and along the north coast of Africa, entering Italy by way of Sicily. The last African invasion left behind it the Giza round skulls of Egypt. This final Alpine expansion taught the other races of Europe, both Mediterranean and Nordic, the art of metallurgy.

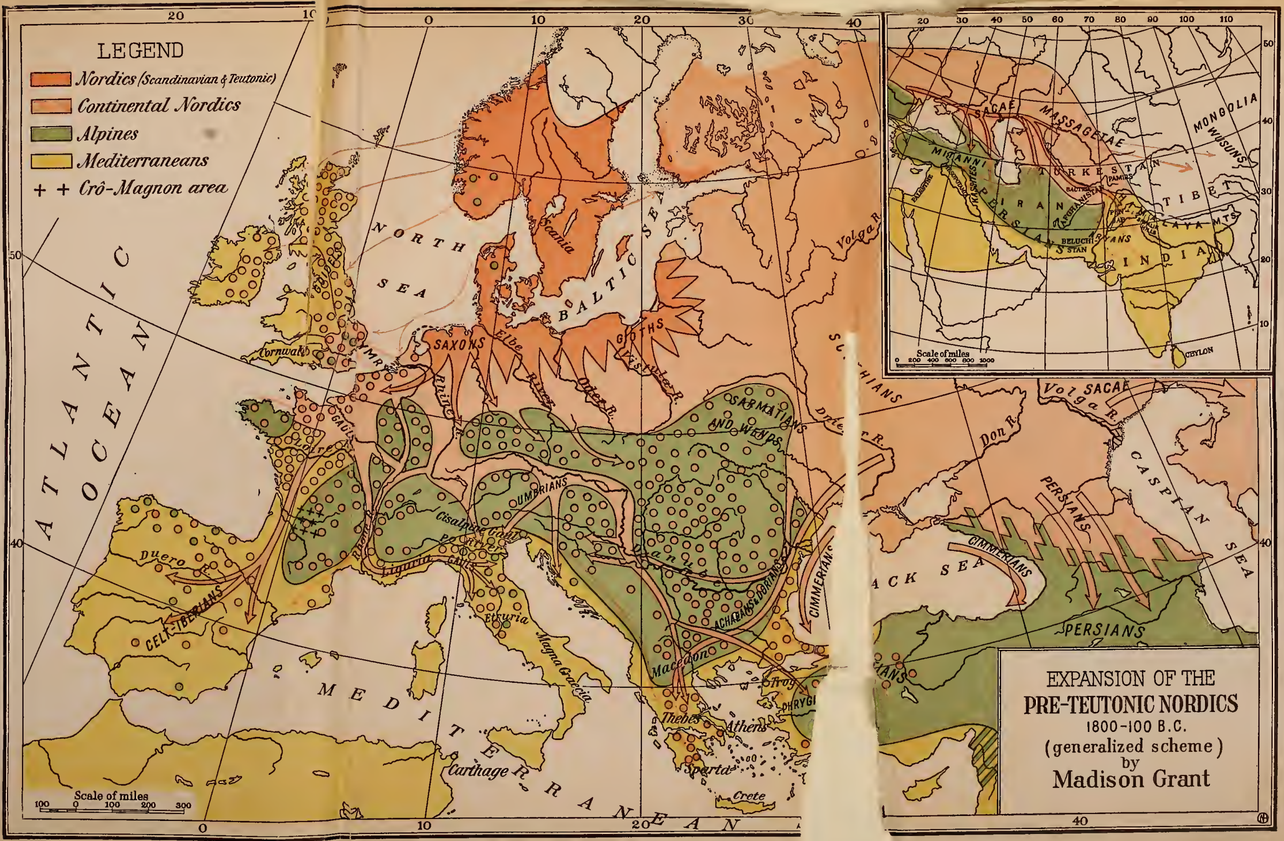
The Nordics apparently originated in southern Russia, but long before the Bronze Period they had spread northward across the Baltic into Scandinavia, where they specialized into the race now known as the Scandinavian or Teutonic. On the map the continental Nordics are indicated by pink and the Nordics of Scandinavia are shown in red. At the very end of the period covered by this map, these Scandinavian Nordics were beginning to return to the continent. The routes of these migrations and their extent are indicated by red arrows and circles respectively.

To sum up, this map shows the expansion from central Asia of the round skull Alpines across central Europe, submerging, in the south and west, the little, dark, long skulled Mediterraneans of Neolithic culture, while at the same time they pressed heavily upon the Nordics in the north and introduced Bronze culture among them.

This development of the Alpines at the expense of the Mediterraneans had a permanent influence in western Europe, but in the north their impress was of a more temporary character. It is probable that in the first instance they were able to conquer the Nordics by reason of the superiority of bronze weapons to stone hatchets. But no sooner had they imparted the knowledge of the manufacture and use of metal weapons and tools to the Nordics than the latter turned on their conquerors and completely mastered them, as appears on the next map.

The Expansion of the Pre-Teutonic Nordics, 1800–100 B. C.

The second map (Pl. II) of the series shows the shattering and submergence of the green Alpine area by the pink Nordic area. It will be noted that in Italy, Spain, France and Britain the solid green and the green dots have steadily declined and in central Europe the green has been torn apart and riddled in every direction by pink arrows and pink dots, leaving solid green only in mountainous and infertile districts. This submergence of the Alpines by the Nordics was so complete that their very existence was forgotten until in our own day it was discovered that the central core of Europe was inhabited by a short, stocky, round skulled race originally from Asia. To-day these Al-


LEGEND
Nordics (Scandinavian & Teutonic)
Continental Nordics
Alpines
Mediterraneans
+ + Crô-Magnon area
ATLANTIC OCEAN
NORTH SEA
BALTIC SEA
MEDITERRANEAN
BLACK SEA
CASPIAN SEA
Scania
Volga R.
SAXONS
GOTHS
Elbe River
Oder R.
Vistula R.
Rhine R.
Dniester R.
Don R.
Danube
Loire
Duero R.
Cornwall
CYMRY
GAULS
CELT-IBERIANS
UMBRIANS
Cisalpine Gaul
Liguria
Etruria
Magna Graecia
Carthage
SARMATIANS AND WENDS
ACHAEANS & DORIANS
Macedon
Thebes
Athens
Sparta
Crete
Troy
PHRYGI
CIMMERIANS
SCYTHIANS
PERSIANS
SACAE
Scale of miles
100 0 100 200 300
MITANNI
KASSITES
IRAN
PERSIANS
TURKESTAN
AFGHANISTAN
BELUCHISTAN
ARYANS
INDIA
HIMALAYA MTS.
TIBET
MONGOLIA
WUSUNS
MASSAGETAE
PAMIRS
CEYLON
Scale of miles
0 200 400 600 800 1000

EXPANSION OF THE
PRE-TEUTONIC NORDICS
1800-100 B.C.
(generalized scheme)
by
Madison Grant

pines are gradually recovering their influence in the world by sheer weight of numbers. On this map the green Alpine area is shown to be everywhere shrinking except in the countries around the Carpathians and the Dnieper River, where the Sarmatians and Wends are located. It was in this district that the Slavic-speaking Alpines were developing. Simultaneously with this expansion toward the west, south and east of the continental Nordics, the Scandinavian or Teutonic tribes appear on the scene in increasing numbers, as shown by the red area and red arrows, pressing upon and forcing ahead of them their kinsmen on the mainland.

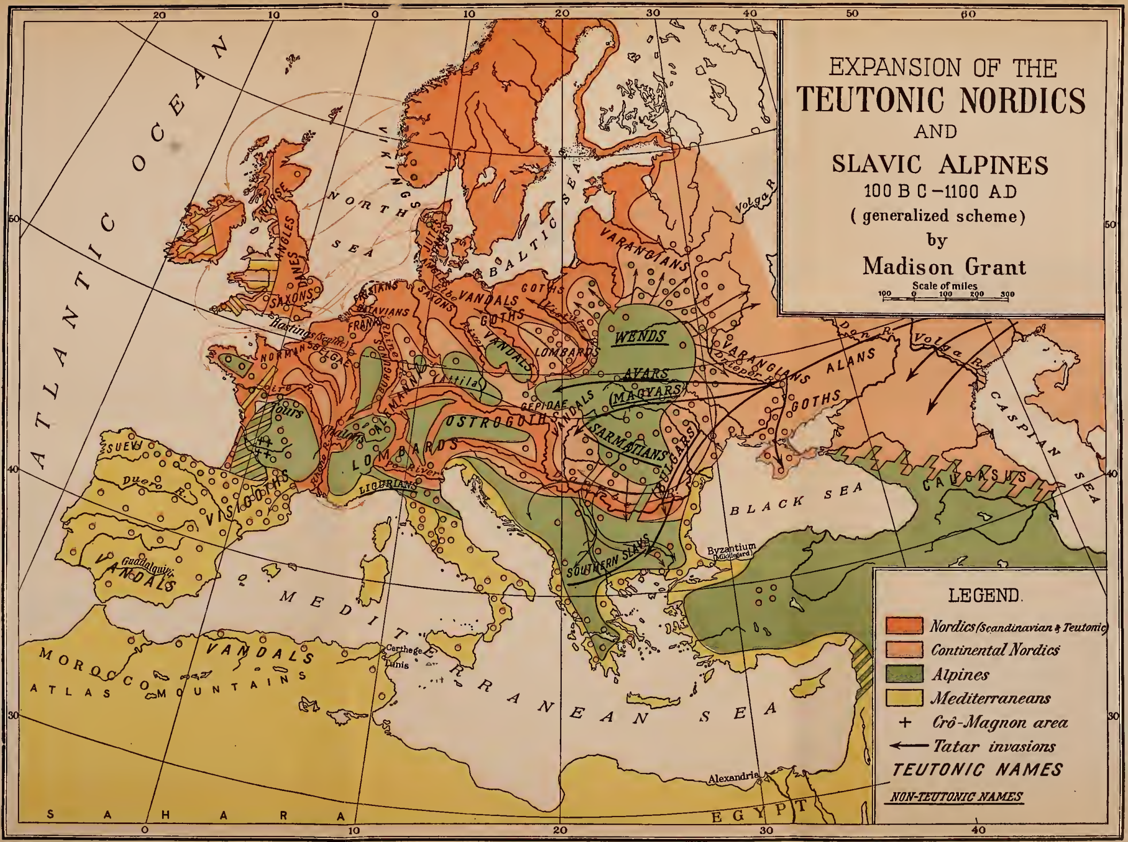
The pink arrows in Spain show the invasion of Celtic-speaking Nordics, closely related to the Nordic Gauls who a little earlier had conquered France. This same wave of Nordic invasion crossed the Channel and appears in the pink dots of Britain and Ireland, where the intruders are known as Goidels. These early Nordics were followed some centuries later by another wave of kindred peoples who were known as Brythons or Cymry in Britain and as Belgæ on the continent. These Cymric Belgæ or Brythons probably represented the mixed descendants of the earliest Teutons who crossed from Scandinavia and had adopted and modified the Celtic languages spoken by the continental Nordics. These Cymric-speaking Nordics drove before them the earlier Gauls in France and the Goidels in Britain, but their impulse westward was very likely caused by the oncoming rush of pure Teutons from Scandinavia and the Baltic coasts.

In Italy the pink arrows entering from the west show the route of the invading Gauls, who occupied the country north of the Apennines and made it Cisalpine Gaul, while the arrows entering Italy from the northeast show the earlier invasions of the Nordic Umbrians and Oscans, who introduced Aryan speech into Italy. Farther east in Greece and the Balkans, the pink arrows show the routes of invasion of the Achæans and the kindred Phrygians of Homer as well as the later Dorians and Cimmerians. In the region of the Caucasus, the routes of the invading Persians are shown and, north of the Caspian Sea, the line of migration of the Sacæ from the grasslands of southern Russia toward the east. In the inset map in the upper right corner is shown the expansion of these Nordics into Asia, where the Sacæ and closely related Massagetæ occupied what is now Turkestan and from this centre swarmed over the mountains of Afghanistan into India and introduced Aryan speech among the swarming millions of that peninsula.

In the northern part of the main map the expansion of the Teutonic Nordics is shown, with the Goths in the east and Saxons in the west of the red area, but the salient feature is the expansion of the pink at the expense of the green and the ominous growth of the red area centring around Scandinavia in the north.

THE EXPANSION OF THE TEUTONIC NORDICS AND SLAVIC ALPINES, 100 B. C. to 1100 A. D.

This map (Pl. III) shows the yellow area greatly diminished in central and northern Europe, while it retains its supremacy in Spain and Italy as well as on the north coast of Africa. In the latter areas the green dots have nearly vanished and have been replaced by pink and red dots. In central Europe the green area is still more broken up and reduced to a minimum. In the Balkans and eastern Europe, however, two large centres of green, north and south of the Danube respectively, represent the expanding power of the Slavic-speaking Alpines. The pink area of the continental Nordics is everywhere fading and is on the point of vanishing as a distinctive type and of merging in the red. The expansion of the Teutonic Nordics from Scandinavia and from the north of Germany is now at its maximum and they are everywhere pressing through the Empire of Rome and laying the foundations of the modern nations of Europe. The Vandals have migrated from the coasts of the Baltic to what is now Hungary, then westward into France and finally, after occupying for a while southern Spain, under pressure of the kindred Visigoths to northern Africa, where they established a kingdom which is the sole example we have of a Teutonic state on that continent. The Visigoths and Suevi laid the foundations of Spain and Portugal, while



EXPANSION OF THE
TEUTONIC NORDICS
AND
SLAVIC ALPINES
100 B C – 1100 A.D
(generalized scheme)
by
Madison Grant

Scale of miles
100 0 100 200 300
LEGEND.
Nordics (Scandinavian & Teutonic)
Continental Nordics
Alpines
Mediterraneans
+ Crô-Magnon area
Tatar invasions
TEUTONIC NAMES
NON-TEUTONIC NAMES
ATLANTIC OCEAN
NORTH SEA
BALTIC SEA
VIKINGS
NORSE
ANGLES
DANES
SAXONS
JUTES
ANGLES
FRISIANS
BATAVIANS
FRANKS
Hastings (Senlac)
NORMANS
BELGAE
Rhine
BURGUNDIANS
ALEMANNI
Elbe
SAXONS
VANDALS
GOTHS
Oder River
VANDALS
GOTHS
Vistula
LOMBARDS
WENDS
(Attila)
AVARS
(MAGYARS)
GEPIDAE
VANDALS
OSTROGOTHS
SARMATIANS
BULGARS
VARANGIANS
Volga R.
Don R.
Dnieper R.
VARANGIANS
ALANS
Volga R.
GOTHS
CASPIAN SEA
CAUCASUS
BLACK SEA
Loire
Tours
Rhone R.
Châlons
LOMBARDS
Po River
LIGURIANS
SUEVI
Duero R.
VISIGOTHS
Guadalquivir
VANDALS
MEDITERRANEAN SEA
SOUTHERN SLAVS
Byzantium (Mikligard)
Carthage
Tunis
VANDALS
MOROCCO
ATLAS MOUNTAINS
SAHARA
Alexandria
EGYPT
20 10 0 10 20 30 40 50 60
50 40 30

the Franks, Burgundians and Normans transformed Gaul into France.

Into Italy for a thousand years floods of Nordic Teutons crossed the Alps and settled along the Po Valley. While many tribes participated in these invasions, the most important migration was that of the Lombards, who, coming from the basin of the Baltic by way of the Danubian plains, occupied the Po Valley in force and scattered a Teutonic nobility throughout the peninsula. The Lombard and kindred strains in the north give to that portion of the peninsula its present predominance over the provinces south of the Apennines.

The conquest of the British Isles by the Teutonic and Scandinavian Nordics was far more complete than was their conquest of Spain, Italy or even northern France. When these Teutons arrived upon the scene, the ancient, dark Neolithics had very largely absorbed the early Nordic invaders, Goidels and Cymry alike. Floods of Saxons, of Angles and later of Danes, crossed the Channel and the North Sea and displaced the old population in Scotland and the eastern half of England, while Norse Vikings following in their wake occupied nearly all of the outlying islands and much of the coast. Both these later invasions, Danish and Norse, passed around the greater island and inundated Ireland, so that the big, blond or red-haired Irishman of to-day is to a large extent a Dane in a state of culture analogous to that of Scotland before the Reformation.

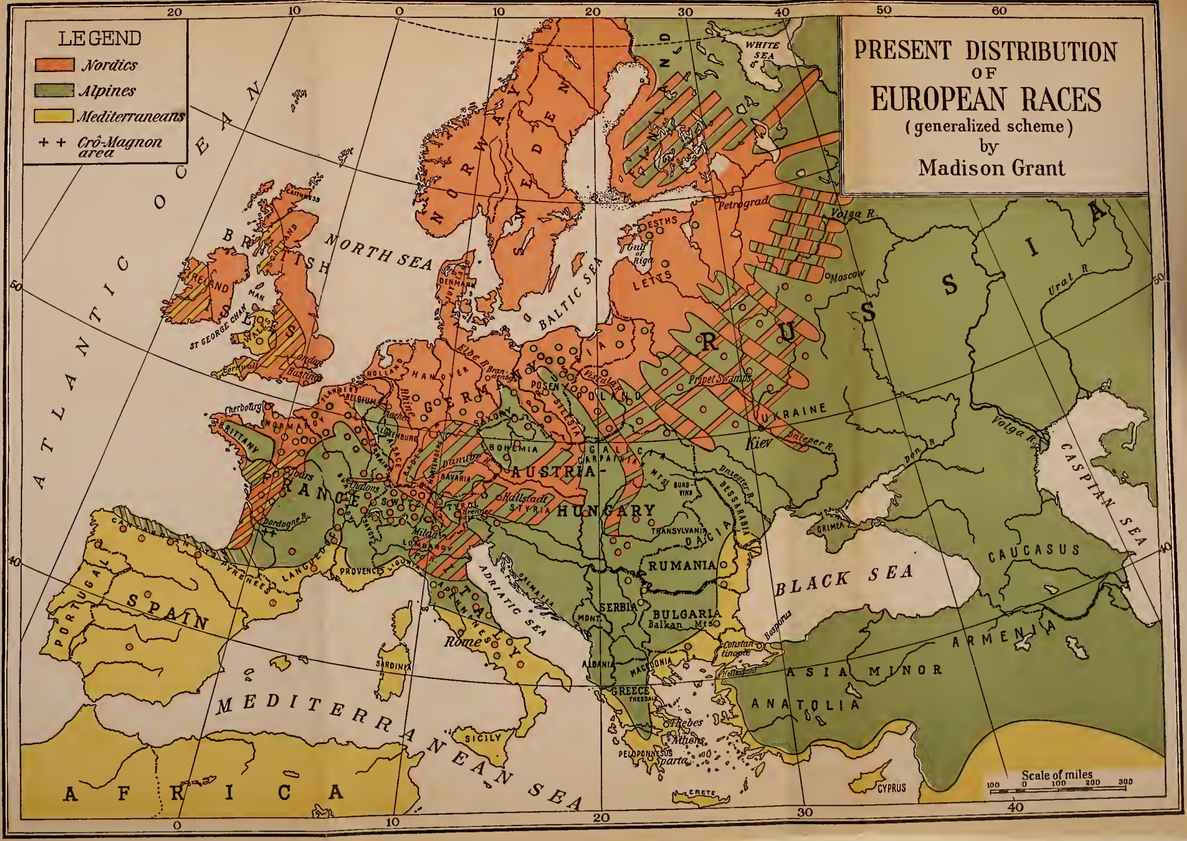
This map shows that the vitality of Scandinavia was far from exhausted after sending for upward of two thousand years tribe after tribe across to the continent and that it was now producing an extraordinarily vigorous type, the Vikings in the west and the equally warlike and energetic Varangians in the east, who migrated back to the motherland of the Nordics and laid the foundations of modern Russia.

While all these splendid conquests were in full swing a little known group of tribes was growing and spreading in eastern and southern Germany and in Austria-Hungary and occupying the lands left vacant by the Teutonic nations, which had invaded the Roman Empire. From this centre in the neighborhood of the Carpathians and in Galicia eastward to the head of the Dnieper River, the Wends and Sarmatians expanded in all directions. They were the ancestors of those Alpines who are to-day Slavic-speaking. From this obscure beginning came the bulk of the Russians and the South Slavs. The expansion of the Slavs is one of the most significant features of the Dark Ages and the author has attempted to indicate the centre of expansion of these tribes by green dots and green arrows, radiating in all directions from the solid green area in Europe. To sum up this map, the yellow area has steadily declined everywhere, while in western Europe the green area is now limited to the infertile and backward mountain regions. In eastern Europe, however, this same green Alpine area is showing a marvellous capacity for recovery, as will appear from the map of the races of to-day.

The red area is widely spread and occupies the river valleys and the fertile lands and represents everywhere the ruling, military aristocracy more or less thinly scattered over a conquered peasantry of Mediterranean and Alpine blood. One phenomenon of dire import is shown on the map, where, coming from the districts north and east of the Caspian Sea, certain black arrows are seen shooting westward into Europe, reaching in one extreme instance as far as Châlons in France, where Attila nearly succeeded in destroying what remained of western civilization. These arrows mark respectively Huns, Cumans, Avars, Magyars, Bulgars and other Asiatic hordes, probably for the most part of Mongoloid origin and coming originally from central Asia far beyond the range of Aryan speech. These hordes of Mongoloids destroyed the budding culture of Russia, while at a later date kindred tribes under the name of Turks or Tatars flooded the Balkans and the valley of the Danube but these later invasions entered Europe from Asia Minor.

THE PRESENT DISTRIBUTION OF EUROPEAN RACES

The preparation of the last map (Pl. IV), showing the present distribution of European races, was in some respects



a more intricate task than that of the earlier maps. The main difficulty is that, as a result of successive migrations and expansions, the different races of Europe are now often represented by distinct classes. Numerically one type may be in a majority, as are the Rumanians in eastern Hungary, where they constitute nearly two-thirds of the population. At the same time this majority is of no intellectual or social importance, since all the professional and military classes in Transylvania are either Magyar or Saxon. Under the existing scheme of showing majorities by color these ruling minorities do not appear at all. In this last map the yellow is beginning to expand, especially in the British Isles. The green also is recovering somewhat in central and western Europe, but in the Balkans, eastern Germany, Austria and above all in Poland and Russia, it has largely replaced the former Nordic color. The pink, *i. e.*, the continental Nordics as a distinct type, has entirely vanished and has been everywhere replaced by the Teutonic red. This does not mean that there are no existing remnants of the continental Nordics, but it does mean that these remnants cannot now be distinguished from the all-pervading and masterful type of the Teutonic Nordics.

In general, this last map, as compared with the earlier ones, although showing a steady shrinkage of the Nordic area, brings out clearly the manner in which it centres around the basins of the Baltic and the North Sea, radiating thence in every direction and in decreasing numbers. The menace of the continued expansion of the green area westward and northward into the red area of the Nordics is undoubtedly one of the causes of the present world war. This expansion began as far back as the fall of Rome, but only in our day and generation has this backward race even claimed a parity of strength and culture with the Master Race.

DOCUMENTARY SUPPLEMENT

The purpose of these notes is to meet an insistent demand for authorities for the statements made in the body of the book. As was mentioned in the Introduction, in a work of this compass and aim, mere lack of space forbade all but the barest outlines, so that often an appearance of dogmatism was the result.

There is a vast literature on the subjects discussed and to give all the references would be almost a physical impossibility. It is particularly difficult to name all that has appeared in periodicals, since they have become so numerous, especially during the last few years.

The author has in mind to refer only to those works which bear directly on the most essential statements made and, necessarily, to but a part of these. In many cases only books which are most easily available have been used. The author has intentionally quoted chiefly works in English, where these exist, and when using foreign authorities has translated the statements.

It must be clearly understood that the references are given for the facts rather than the theories they contain. In no case, unless specifically stated, is the author committed to the conclusions drawn in the works cited. In order to present all sides, authorities who differ in view-point are sometimes listed, the reader being left to make his own decision of the case.

It is hoped that the references will be of assistance to students of anthropology and to those who care to inquire further into the subjects under discussion.

Where an author is quoted frequently or for more than one book, he is referred to merely by name; the book is given by number immediately following. Its full title may be ascertained in the bibliography.

DOCUMENTARY SUPPLEMENT

PART I

INTRODUCTION

Page xix : line 22. Immutability of somatological or bodily characters. Charles B. Davenport, pp. 225 *seq.* and 252 *seq.:* William E. Castle, 1, pp. 125 *seq.;* Frederick Adams Woods, 3, p. 107; and Edwin G. Conklin, 1, pp. 191 *seq.* See the note to p. 226, 7 for a quotation from Conklin bearing on this point.

xix : 23. Immutability of psychical predispositions and impulses. See note above. Professor Irving Fisher said, on p. 627 of *National Vitality*, speaking of laws relating to eugenics: "What such laws might accomplish may be judged from the history of two criminal families, the 'Jukes' and the 'Tribe of Ishmael.' Out of 1,200 descendants from the founder of the 'Jukes' through 75 years, 310 were professional paupers . . . 50 were prostitutes, 7 murderers, 60 habitual thieves, and 130 common criminals." Certainly these facts were not all due entirely to identity or similarity of environment. On p. 675 we read: "Similarly, the 'Tribe of Ishmael,' numbering 1,692 individuals in six generations, has produced 121 known prostitutes and has bred hundreds of petty thieves, vagrants and murderers. The history of the tribe is a swiftly moving picture of social degeneration and gross parasitism extending from its seventeenth-century convict ancestry to the present-day horde of wandering and criminal descendants." See R. L. Dugdale and Oscar C. McCulloch, pp. 154–159. For transmission of opposite tendencies see pp. 675–676, Fisher. The Jukes were a family of Dutch descent, living in an isolated valley in the mountains of northern New York. The Ishmaels were a family of central Indiana which came from Maryland through Kentucky. The Kalikak family is another striking instance. See also Davenport, 1, and the note to p. 226: 7.

xxi : 5. Professor Charles B. Davenport says in correspondence: "By the way, it was Judge John Lowell who added 'free and' to the words of the Declaration in writing the Constitution of Massachusetts in the latter part of the eighteenth century."

xxiii : 20–25. *A Statistical Account of the British Empire.* J. R. McCulloch, vol. I, pp. 400 *seq.*

CHAPTER I. RACE AND DEMOCRACY

4 : 6. Archbishop Ussher, 1581–1656. See the *New Schaff-Herzog Religious Encyclopedia;* also other religious encyclopedias. Taylor, *Origin of the Aryans*, p. 8.

5 : 15. See Émile Faguet, *Le Culte de l'Incompêtence.*

6 : 3. *Cf. The Loyalists of Massachusetts*, by James H. Stark.

9 : 7. A good description of conditions is to be found in Bryce's *The Remarkable History of the Hudson's Bay Company*, p. 73, all of chapter XLII and elsewhere.

10 : 3 *seq.* Charles B. Davenport, *passim*, has discussed migratory instincts, see especially 1.

10 : 16–17. These conditions are quaintly described in what is known as the *Italian Relation*, translated by Charlotte Augusta Sneyd. See especially pp. 34 and 36. The resulting laws may be found in Sir James Fitzjames Stephen's *History of the Criminal Law of England*, vol. III, pp. 267 *seq.;* Pollard's *Political History of England*, vol. VI, pp. 29–30; Green's *History of the English People*, vol. II, pp. 20; and elsewhere.

11 : 3. See the note to p. 79 : 15.

11 : 17. See Notes to p. 218 : 16.

11 : 20. For a very interesting series of letters written from Santo Domingo in 1808 concerning conditions among the whites as the negro slaves were gaining the ascendancy, consult the anonymous *Secret History, or The Horrors of Santo Domingo*, in a series of letters written by a lady at

Cape François to Colonel Burr (late Vice-President of the United States), principally during the command of General Rochambeau. Lothrop Stoddard, in his *French Revolution in San Domingo*, pp. 25 *seq.*, gives a vivid picture of these times and conditions.

11 : 24. *Immigration Restriction and World Eugenics*, Prescott Hall, pp. 125–127.

CHAPTER II. THE PHYSICAL BASIS OF RACE

13 : 7. See W. D. Matthew, *Climate and Evolution;* John C. Merriam, *The Beginnings of Human History, Read from the Geological Record: The Emergence of Man*, especially pp. 208–209 of the first part; and Madison Grant, *The Origin and Relationships of North American Mammals*, pp. 5–7.

13 : 20. Mendelism. See Edwin G. Conklin, 1, chap. III, C, pp. 224 *seq.*, or 2, vol. X, no. 2, pp. 170 *seq.* Also Punnett's *Mendelism*, or the appendix to Castle's *Genetics and Eugenics*, which is a translation of Mendel's paper. Practically all late writers on heredity give Mendel's principles.

13 : 22–14 : 10. For these and other statements on heredity see the writings of Charles B. Davenport, Frederic Adams Woods, G. Archdall Reid, Edwin G. Conklin, Thomas Hunt Morgan, E. B. Wilson, J. Arthur Thomson, William E. Castle, and Henry Fairfield Osborn, 2.

14 : 10 *seq.* Blends. E. G. Conklin remarks in correspondence: "In so far as races interbreed, their characters mingle but do not blend or fuse, and come out again in all their purity in descendants." See also the same authority, 1, pp. 208, 280, 282-287.

Every now and then an observation is met with which corroborates this statement. The inheritance from one parent or the other of the shape of the skull, in a fairly pure form, has been noted a number of times.

Fleure and James in their study of the *Anthropological Types in Wales*, p. 39, make the following observation: "It may be said that certain component features of head form, in many cases, seem to segregate more or less in Mendelian fashion, but this is a matter for further investigation; we are on safer ground in saying that the children of parents of different head form very frequently show a fairly complete resemblance to one or other parent, *i. e.*, that head form is frequently inherited in a fairly pure fashion."

Von Luschan found still more striking evidence of this in his study of modern Greeks, which he describes in his *Early Inhabitants of Western Asia.* He has found that the children of parents of different head form inherit in quite strict fashion the shape of skull of one or the other parent, and that the population, instead of being mesaticephalic, is to-day as distinctly divided into two groups, dolicho- and brachycephalic, as in prehistoric times, in spite of the constant intermixture that has occurred.

14 : 18. See notes to p. 13. This is a statement made by Dr. Davenport, in correspondence.

15 : 17. On the Neanderthal and Cro-Magnon types consult Professor Arthur Keith, 1, pp. 101–120, and 2; also Henry Fairfield Osborn, 1, the table on p. 23, pp. 214 *seq.*, 289 *seq.*, 291–305 and elsewhere, and the authorities given.

On the resurgence of types, see Beddoe, 4; Fleure and James; Giuffrida-Ruggeri; Parsons; and numerous other recent anthropologists.

15 : 25. See the notes to p. xix of the Introduction to this book, and Keith, 2.

15 : 29 *seq.* Professor G. Elliot Smith, *The Ancient Egyptians*, chap. IV, and pp. 41 *seq.* On p. 43 we read: "If we want to add to such sources of information and complete the picture of the early Egyptian . . . he can be found reincarnated in his modern descendants with surprisingly little change, either in physical characteristics or mode of life, to show for the passage of six thousand years." On p. 44: "Although alien elements from north and south have been coming into Upper Egypt for fifty centuries, it has been a process of percolation, and not an overwhelming rush; the population has been able to assimilate the alien minority and retain its own distinctive features and customs with only slight change; and however large a proportion of the population has taken on hybrid traits resulting from Negro, Arab,

or Armenoid admixture, there still remain in the Thebaid large numbers of its people who present features and bodily conformation precisely similar to those of their remote ancestors, the Proto-Egyptians." See also G. Sergi, 1, p. 65, and 4, p. 200.

17 : 5. See Franz Boas, *Changes in the Bodily Form of the Descendants of Immigrants*, pp. 9, 27, etc.

17 : 28–18 : 7. See the notes to p. 13.

18 : 13. See notes to p. 14. Also Ripley, pp. 465–466 for a statement as to brunetness.

18 : 24–19 : 2. E. G. Conklin, 1, pp. 454–455, and 2, especially vol. X, no. 1, pp. 55–58.

19 : 3. Anders Retzius was the first to make use of the head form in anthropological study, and to give the impetus to the index measurement system in *The Form of the Skulls of the Northern Peoples of Europe*. See also A. C. Haddon, 1, chap. I, in which he discusses these traits in full, and Ripley, chap. III, especially pp. 55 *seq.* Modern physical anthropologists still agree that the skull form is a most stable and reliable character.

19 : 25. Ripley, p. 39.

19 : 27–pp. 20 and 21. Beddoe, Broca, Collignon, Livi, Topinard and a host of other anthropologists all affirm the existence of three European racial types, which Ripley has discussed exhaustively. Deniker alone differs from them in classifying the populations of Europe, from the same data, into six principal races and four or more sub-races. See Appendix D, in Ripley's *Races of Europe*.

The three terms, Nordic, Alpine and Mediterranean, have now become quite generally accepted designations for the three European races. The term Nord, rather than Nordic, has been chosen, perhaps more wisely, by some authors. In the present book these names are applied with quite different connotations from those usually understood.

It cannot be too clearly stated that in speaking of Nordics, the proto-type was probably quite generalized, with hair shades including the browns and reds. In the author's opinion the blond Scandinavian represents an extreme specialization of Nordic characters. (See p. 167 of this book.)

20 : 5–24. The term Nordic was first used by Deniker. The authorities for the descriptions of these races may all be found in Ripley. The Mediterranean race was first defined by Sergi, who also calls it Eurafrican. The term Alpine, proposed by Linnæus, was revived by DeLapouge, and later adopted by Ripley, since when it has come into general use. Sergi and Zaborowski prefer that of Eurasian. While this latter name does cover the requirements, since it correctly signifies not only the European and Asiatic range of the people under discussion, but also their actual relationship to Asiatics, it is objectionable because it implies the adoption of the similarly constructed term Eurafrican, which, as defined by Sergi, is misleading. Correct as Eurafrican may be for signifying the European and African range of the Mediterranean race, it involves an acceptance of the theory put forward by its sponsor, that the Mediterranean race originated in Africa and is closely related to the negro, both being long-skulled peoples, descended from a common stock, the Eurafrican.

The chief objection to the term Mediterranean is that the race extends in habitat beyond the Mediterranean region, but the name is now so generally accepted and this fact so well known that misunderstandings are unlikely. The term Alpine, also, is not as inappropriate as it might seem, since the word Alps is frequently not confined to the Swiss ranges but extended to many other mountain chains, and Alpine, like the term Mediterranean, is not, at this late date, apt to be misunderstood.

20 : 24–21 : 9. Von Luschan, *The Early Inhabitants of Western Asia*, pp. 221–244, and G. Elliot Smith, *The Ancient Egyptians*.

22 : 10. Thomson, *Heredity*, p. 387; Darwin, *Descent of Man;* Boas, *Modern Populations of America*, p. 571.

22 : 25. Haddon, 1, pp. 15 *seq.*

22 : 29. The same, pp. 12–14.

23 : 8. Clark Wissler, in *The American Indian*, makes clear the general uniformity of American Indian types in chap. XVIII. See also Haddon, 1, p. 8, and Hrdlička, *The Genesis of the American Indian*, pp. 559 *seq.*

23 : 13. Haddon, 1, pp. 10 and 11. There are numerous other references to this fact, especially in articles in various anthropological journals, and general works on anthropology, such as those of Deniker, Collignon, Martin and Ratzel.

23 : 16. For the differentiation of skull types in Europe during the Paleolithic period, see Keith, 2, the chapters on Pre-Neolithic, Mousterian and Neanderthal man; and 1, pp. 74 *seq.;* as well as Osborn, 1, who also gives the dates of the Paleolithic in the table on p. 18.

24 : 3–5. This claim was put forth by Sergi, in his *Mediterranean Race*, pp. 252, 258–259, and was followed by Ripley in his *Races of Europe.*

24 : 14. Deniker, *Races of Man*, pp. 48–49; Ripley, p. 465.

25 : 5. Topinard, 1, 4; Collignon, 1; and Virchow, 1, p. 325; Ripley, p. 64. Ripley says: "If the hair be light, one can generally be sure that the eyes will be of a corresponding shade. Bassanovitch, . . . p. 29, strikingly confirms this rule even for so dark a population as the Bulgarian."

25 : 6. See p. 163 of this book on the Albanians.

25 : 8. Ripley, pp. 75–76 and the footnote on p. 76.

25 : 11. Deniker, 2, p. 51. Also Davenport, *passim.*

25 : 13. Sir Edmund Loder, in correspondence, February, 1917, asks: "Has it been noticed at Creedmore and elsewhese in America that nearly all noted shots have blue eyes? It has been very noticeable at Wimbledon and Bisby, where it was quite exceptional to find a man in the front rank of marksmen with dark colored eyes. There was, however, one man who shot in my team who had very dark eyes and was one of the best shots of the day."

25 : 16. There are said to be blue eyes occasionally in other races, where traces of Nordic blood cannot be discovered. Green and blue eyes have been found among the Rendeli (Desert Masai), although they are otherwise normal negroes.

25 : 19. The following quotation is from Von Luschan, 1, p. 224: "In Marmaritza near Halikarnassos, where a British squadron had a winter station for many years, a very great proportion of the children is said to be 'flaxen-haired.'" According to a statement made to the author by

Professor G. Elliot Smith on May 4, 1920, a similar nest of blondness is found in the Egyptian delta near Aboukir and is due to the fact that after the battle of the Nile the Seaforth Highlanders were long stationed there. At one time this blondness was supposed to bear some relation to the ancient Lybian blondness depicted on the monuments.

25 : 25 *seq.* On the Berbers see Sergi, 4, pp. 59 *seq.*, and Topinard, 3. In regard to the Albanians, Ripley refers to their blondness, on p. 414, as follows: "The Albanian colonists, studied by Livi and Zampa in Calabria, still, after four centuries of Italian residence and intermixture, cling to many of their primitive characteristics, notably their brachycephaly and their relative blondness." See also Zampa, 1, and Deniker, 1, for scientific discussions of their physical characters. Giuffrida-Ruggeri gives a summary of the most recent literature on Albania.

25 : 29–26 : 6. See Beddoe, *The Races of Britain*, pp. 14, 15 and *passim.*

26 : 18. Beddoe, 4, p. 147.

27 : 1 *seq.* See Ripley, pp. 399–400 for a summary of observations on this point. See also Darwin, *Descent of Man*, pp. 340–341 and 344 *seq.;* and Fleure and James, p. 49.

27 : 14–28 : 19. Haddon, 1, p. 2; also 2; Deniker, 2, chap. II and *passim.*

28 : 19. Davenport, *passim;* Ripley, *passim;* and any general book on anthropology.

28 : 24–29 : 17. Ripley, pp. 80, 81, 84, 108–109, 131, 132, 252, 271, 307. Also see Davenport and Conklin, *passim*, and the notes to p. 18 of this book.

30 : 18–31 : 8. For a very interesting discussion of this question see Conklin, 2, vol. IX, no. 6, pp. 492–6; Deniker, 2, p. 18; Haddon, 2, chap. IV; and Louis R. Sullivan, *The Growth of the Nasal Bridge in Children*, are other authorities. Some special studies of the nose have been made by Majer and Koperniki, Weisbach, and Olechnowicz, for which see Ripley, pp. 394–395. Jacobs, pp. 23–62, is particularly good on nostrility.

31 : 9. Deniker, 2, p. 83.

31 : 13. On the shape of the foot as a racial character see

Rudolf Martin, *Lehrbuch der Anthropologie*, pp. 317 *seq.;* and Beddoe, 4, pp. 245 *seq.;* W. K. Gregory, 2, p. 14, and John C. Merriam, vol. IX, pp. 202 *seq.*, have both discussed the evolution of the foot and the hand, and the anatomical differences which distinguish those of man from those of the apes.

31 : 16. P. Topinard, 2, chap. X, and Rudolf Martin, pp. 367 *seq.*

32 : 4. Beard lighter than head hair. Darwin, *Descent of Man*, p. 850.

32 : 8. The red-haired branch of the Nordics. On red hair see Beddoe, 4, pp. 3, 151–156; Fleure and James, *Anthropological Types in Wales*, pp. 118 *seq.;* Ripley, pp. 205–207, based on Arbo; T. Rice Holmes, *Cæsar's Conquest of Gaul*, p. 337; and F. G. Parsons, *Anthropological Observations on German Prisoners of War*, pp. 32 *seq.*

32 : 21. See notes to p. 66.

33 : 7. Haddon, 1, p. 9 *seq.;* Deniker, *Races of Man;* Ratzel, *History of Mankind;* etc.

33 : 13. Haddon, 1, p. 16 *seq.;* Deniker; Ratzel; etc.

33 : 23–34 : 21. Haddon, 1, pp. 2 and 3, and Deniker, 2, pp. 42 *seq.* While this classification is substantially sound, and sufficient for our purpose, recent investigations have shown that other factors also contribute to straightness or kinkiness, such as coarseness of texture, as opposed to fineness. Probably these will be determined by Mr. Louis R. Sullivan, of the American Museum of Natural History, who is working on the subject. It has been found that the Japanese and Eskimo are exceptions to the rule of "straight hair, round cross-section," for they show an ellipse. There is also a wide range of variation in the cross-sections of hair for individuals of any race, who are classified according to the preponderance of cross-sections of a single type. For a fine series of plates which are photographs of the magnified hair of individuals of various races, see *Das Haupthaare und seiner Bildungsstatte bei den Rassen des Menschen*, Gustave Fritsch. Another recent paper is the study by Leon Augustus Hausmann of Cornell, "The Microscopic Structure of the Hair as an Aid in Race Determination."

35 : 27. Livi, *Antropometria Militare*, and Ripley, pp. 115, 255 and 258.

36. Deniker, 1; Zampa, 1, 2; Weisbach, 1, 2, 3; and others given by Ripley, pp. 411-415.

CHAPTER III. RACE AND HABITAT

37 : 6. Sir G. Archdall Reid, *The Principles of Heredity*, chaps. VII, VIII, IX.

37 : 17. Ripley discusses them in full in chap. VI.

37 : 20–38 : 2. W. Boyd Dawkins, *Early Man in Britain*, p. 233; Keane, *Ethnology*, pp. 110 *seq.;* Osborn, *Men of the Old Stone Age*, pp. 220, 479–486 *seq.;* Keith, *Antiquity of Man*, p. 16.

38 : 10. Ellsworth Huntington, 1, p. 83; Charles E. Woodruff, 1, pp. 85–86; also the Report of the Smithsonian Institution for 1891, which contains an article on "Isothermal Zones."

38 : 17 *seq.* Ellsworth Huntington, 1, pp. 86 *seq.*

40 : 27. Ellsworth Huntington, 1, pp. 14, 27.

41 : 25–42. G. Retzius, *On the So-called North European Race of Mankind*, p. 300; and many other authorities.

43 : 23. Ripley, pp. 352 *seq.* and 470.

44 : 17. G. Elliot Smith, 1, p. 61; G. Sergi, 4.

44 : 26. Ripley, pp. 443 and 582–583.

45 : 2. Beddoe, 4, p. 270.

CHAPTER IV. THE COMPETITION OF RACES

47 : 17. Prescott F. Hall, *Immigration Restriction and World Eugenics.*

49 : 15–51. See the *Eugenics Record Office Bulletins*, 10A and 10B, by Harry H. Laughlin, Cold Spring Harbor, Long Island. Part I is "The Scope of the Committee's Work"; Part II, "The Legal, Legislative and Administrative Aspects of Sterilization." See also H. H. Hart, *Sterilization as a Practical Measure;* and Raymond Pearl, *The Sterilization of Degenerates;* as well as *The Eugenical News* for April, May and August, 1918.

52 : 17. Sir Francis Galton, *Hereditary Genius*, pp. 351–359; Darwin, *The Descent of Man*, p. 218.

53 : 6. Galton, *Hereditary Genius*, pp. 345–346.

55 : 3 *seq.* Sir G. Archdall Reid, 2, p. 182; *The Handbook of the American Indian*, under *Health and Disease;* Payne, *A History of the New World Called America;* and elsewhere in early accounts. Also, Paul Popenoe, *One Phase of Man's Modern Evolution*, p. 618.

CHAPTER V. RACE, LANGUAGE AND NATIONALITY

60 : 18. See the note to p. 18.

62 : 2. Ripley, *passim;* and the notes to pp. 142 : 23, 172 : 22, 187 : 23, 188 : 15, 195 : 18, 213 and 247 of this book.

63 : 13. This absence of round skulls was universally accepted, but recent studies show an appreciable Alpine element which is increasing.

64 : 2 *seq.* See pp. 201 and 203.

64 : 18. Ripley discusses the Slavs in full in chap. XIII, and gives the original sources for all of his information.

65 : 1. Ripley, pp. 422–428.

65 : 3. Von Luschan, 1; Ripley, pp. 406–411.

65 : 14. Ripley, pp. 361 *seq.*

66 : 4. Blumenbach was the first to divide the races into Caucasian, Mongolian, Ethiopian, American and Malayan, in his *De Generis Humani Varietate Nativa*, in 1775.

66 : 8–23. Ossetes. For a full description of these people see Zaborowski, *Les peuples aryens d'Asie et d'Europe*, pp. 246–272. Deniker likewise treats of them in *Races of Man*, p. 356. Minns, *Scythians and Greeks*, p. 37, says: "Klaproth first proved in 1822 that the Ossetes are the same as the Caucasian Alans, and this is supported by the testimony of the chroniclers, Russian, Georgian, Greek and Arab. From Ammianus Marcellinus (XXXI, II, 16–25) we know that at the time of the Huns' invasion these Alans pastured their herds over the plains to the north of the Caucasus, and made raids upon the coast of the Mæotis and the

peninsula of Taman. The Huns passed through their land, plundering Ermanrich, the king of the Goths. . . . Ammianus means by Alans all the nomadic tribes about the Tanais (Don) and gives a description of their habits, borrowed from the account of the Scythians in Herodotus. For the first three centuries of our era we find these Alans mentioned (Pliny, *N. H.*, IV, 80; Dionysius Perigetes, 305, 306; Fl. Josephus, Bell. Jud., VII, VII, 4; Ptolemy, etc.), as neighbors of the Sarmatians on this side or the other of the Don, living the same life and counting as one of their tribes. That is, that the Ossetes, Jasy, Alans, Sarmatians* are all of one stock, once nomad, now confined to the valleys of the central chain of the Caucasus. The Ossetes are tall, well-made, and inclined to be fair, corresponding to the description of the Alans in Ammianus (XXXI, II, 21) and their Iranian language answers to the accounts of the Sarmatians, of whom Pliny says 'Medorum ut ferunt soboles' (*N. H.*, VI, 19)."

Chantre found among the Ossetes 30 per cent of blonds. See Chantre, 2.

66 : 16. Alans. See Jordanes, *History of the Goths*, Mierow translation. Procopius, writing about 550 A. D., says: "At this time the Alani and the Absagi were Christians and friends of the Romans of old and lived in the neighborhood of the Caucasus." In his vol. III, chap. II, 2–8, we read of the period from 395–425 A. D. "There were many Gothic nations in earlier times just as also at the present, but the greatest and most important of all are the Goths, Vandals, Visigoths and Gepædes. In ancient times, however, they were named Sauromatæ and Melanchlæni, and there were some too who called these nations Getic. All these, while they are distinguished from one another by their names, as has been said, do not differ in anything else at all. For they all have white bodies and fair hair and are tall and handsome to look upon, and they use the same laws, and practise a common religion. For they are all of

*The author agrees with Zaborowski and differs from Minns in his belief that the Ossetes are of Nordic stock while the Sarmatians were Alpines.

the Arian faith and have one language called 'Gothic.'" (Procopius thinks they all came originally from one tribe, and were distinguished later by the names of those who led each group of old. They dwelt north of the Danube and later the Gepædes took possession of the portion south of the river. In regard to the derivation of the Goths and other tribes from the Sauromatæ, compare the note on Sarmatians, for p. 143 : 21.) As to the Goths in the Crimea see Zeuss, *Die Deutschen*, pp. 432 *seq.;* F. Kluge, *Geschichte der götischen Sprache*, pp. 515 *seq.* Crim-götisch existed as a language in southern Russia up to the 16th century.

66 : 23. Scythians. See the note to p. 214 : 10.

66 : 24. Indo-European. The earliest known occurrence of this term is in an article in *The Quarterly Review* for 1813, written by Doctor Thomas Young (no. XIX, p. 225).

Indo-Germanic. This term, although said not to have been invented by Klaproth, was used by him as early as 1823. See Leo Meyer, in *Über den Ursprung der Namen Indo-Germanen, Semiten und Ugro-finner, Göttingergelehrte Nachrichten, philologisch-historische Klasse*, 1901, pp. 454 *seq.*

67 : 4. The idea of an Aryan race was first promulgated by Oscar Schrader in his *Sprachvergleichung und Urgeschichte.* That there was an original Aryan tongue but no Aryan race was the idea of Broca. Pösche identified the Aryans with the Reihengraber type. Consult also Penka, *Herkunft der Arier* and *Origines Ariacæ.*

67 : 12. See Zaborowski, 1, pp. 1–10.

67 : 15. See the notes to p. 70 : 22 *seq.*

67 : 19. See the notes to p. 242 : 5.

68 : 11. See pp. 192–193 and elsewhere, in this book.

CHAPTER VI. RACE AND LANGUAGE

69 : 10. See T. Rice Holmes, 2, pp. 185–199. The same thing may have happened in Britain at Cæsar's conquest, and still more in the Saxon conquest.

70 : 4 *seq.* See p. 206 : 13 and note.

70 : 12–71 : 6. These paragraphs elicited a very interesting letter from a British officer in Howrah, Bengal, India,

in October, 1919. He says: "May I offer one or two remarks on points of detail? On p. 70 it is stated 'The Hindu today speaks a very ancient form of Aryan language but there remains not one recognizable trace of the blood of the white conquerors who poured in through the passes of the Northwest,' and again at p. 261, 'Of all the wonderful conquests of the Sacæ there remain as evidence of their invasions only these Indian and Afghan languages. Dim traces of their blood, as stated before, have been found in the Pamirs and in Afghanistan, but in the South their blond traits have vanished, even from the Punjab. It may be that the stature of some of the Afghan hill tribes and of the Sikhs, and some of the facial characters of the latter, are derived from this source, but all blondness of skin, hair and eye of the original Sacæ have utterly vanished.'

"This hardly agrees with my own observations during two years' service in the Punjab and Northwest Frontier Province. I should say that among the Pathans living in British territory about Peshawar, blond traits,—fair skin, the color of old ivory, red or brown hair, grey, green, or blue eyes,—are as common as really black hair is in Scotland; while among Panjabi Mussulmans living about Jhelum these traits are, if not common, at least not extremely rare. Judging from the experience of one squadron of cavalry, I should put the proportion of men with blond traits at not less than one per cent. The women, whom one does not see, must be fairer than the men, as elsewhere. I have seen a small Panjabi Mahommedan girl, from about Dera Ismail Khan with *yellow* hair. I have also seen a *Sikh* with *red* hair, but that was certainly exceptional.

"These remarks are based on what I have seen myself, though no statistics are kept and it is possible that I am generalizing from insufficient data. It would not, however, I think, be too much to say that 'Blond traits are not uncommon in Afghanistan, and are even to be found among Mussulmans in the Northwestern Panjab.' (Afghans and Indian Mussulmans of course sometimes dye their beards red, but this artificial blondness has not been confused with the real thing.)"

The following quotation is from *The Outlook* for March 10, 1920, which contains an article entitled "The Present Situation in India," by Major-General Thomas D. Pilcher, of the British Army.

"Beside these castes there are tribes, and the Brahmin from the Punjab has very little indeed in common with the Brahmin from Bengal or Madras. Many Pathans and Punjabi Mohammedans have blue eyes and are no darker than a southern European, whereas some of the depressed tribes are as black as Negroes. Many of the northern peoples are at least as tall as men of our own race, whereas other tribes do not average five feet."

70 : 16. Castes. Deniker, 2, p. 403: "About 2,000 castes may be enumerated at the present day, but year by year new ones are being called into existence as a certain number disappear." In his footnote Deniker says: "The so-called primitive division into four castes: Brahmans (priests), Kshatriya (soldiers), Vaisyas (husbandmen and merchants), and Sudra (common people, outcasts, subject peoples?), mentioned in the later texts of the Vedas, is rather an indication of the division into three principal classes of the ruling race as opposed, in a homogeneous whole, to the conquered aboriginal race (fourth caste)." He continues: "The essential characteristics of all castes, persisting amid every change of form, are endogamy within themselves and the regulation forbidding them to come into contact one with another and partake of food together."

See also Zaborowski, *Les peuples aryens*, p. 65. There is, of course, an enormous number of books which deal with the caste system of India.

71 : 7. Sir G. Archdall Reid, 2, p. 186: "If history teaches any lesson with clearness, it is this, that conquest, to be permanent, must be accompanied with extermination; otherwise, in the fulness of time, the natives expel or absorb the conquerors. The Saxon conquest of England was permanent; of the Norman conquest there remains scarcely a trace."

71 : 24. See pp. 217–222 and notes.

72 : 4. See the notes to p. 141 : 4 *seq.*

72 : 19. Ripley, pp. 219–220, says: "The race question

in Germany came to the front some years ago under rather peculiar circumstances. Shortly after the Franco-Prussian War, De Quatrefages promulgated the theory . . . that the dominant people in Germany were not Teutons at all, but were directly descended from the Finns. Being nothing but Finns, they were to be classed with the Lapps and other peoples of western Russia. . . . Coming at a time of profound national humiliation in France . . . the book created a profound sensation. . . . A champion of the Germans was not hard to find. Professor Virchow of Berlin set himself to work to disprove the theory which thus damned the dominant people of the empire. The controversy, half political and half scientific, waxed hot at times. . . . One great benefit flowed indirectly from it all, however. The German government was induced to authorize the official census of the color of hair and eyes of the six million school children of the empire. . . . It established beyond question the differences in pigmentation between the North and the South of Germany. At the same time it showed the similarity in blondness between all the peoples along the Baltic. The Hohenzollern territory was as Teutonic in this respect as the Hanoverian."

73 : 6. Deniker is one of these. See his *Races of Man*, p. 334. Collignon is another. See the *Bulletin de la Société d'anthropologie*, Paris, 1883, p. 463; and *L'Anthropologie*, no. 2, for 1890.

73 : 11. See Keith, 3, p. 19; Beddoe, 4, p. 39; and Ripley, section on Germany.

73 : 19. Beddoe, 4, pp. 39–40; Deniker, 2, p. 339; Ripley, p. 294.

74 : 12. See the note to p. 198 : 22.

CHAPTER VII. THE EUROPEAN RACES IN COLONIES

76 : 16. An old edition of the *Encyclopædia Britannica* states: "The pure white population [of Venezuela] is estimated at only one per cent of the whole, the remainder of the inhabitants being Negroes (originally slaves, now all free), Indians and mixed races (Mulattos and Zambos)."

The 11th edition of the *Encyclopædia Britannica* estimates the percentage of whites, the creole element (whites of European descent), at 10 per cent, as in Colombia, and the mixed races at 70 per cent, the remainder consisting of Africans, Indians and resident foreigners.

76 : 19. Jamaica. The *New International Encyclopedia*, 1915 edition, gives as follows figures which agree with the 1915 *Statesman's Yearbook:*

YEAR	WHITE	COLORED	BLACK	OTHERS	TOTAL
1861........	13,816	81,065	346,374	......	441,255
1871........	13,101	100,346	392,707	......	506,154
1881........	14,432	109,946	444,186	12,240	580,804
1891........	14,692	121,955	488,624	14,220	639,491
1911........	15,605	163,201	630,181	*22,396	831,383

* East Indians, 17,380; Chinese, 2,111; not stated, 2,905.

76 : 21. The 11th edition of the *Encyclopædia Britannica* gives the entire population of Mexico as 13,607,259, of which less than one-fifth (19 per cent) were classed as whites, 38 per cent as Indians, and 43 per cent as mixed bloods. There were 57,507 foreign residents, including a few Chinese and Filipinos.

78 : 5. The Argentine Republic. In 1810 the population was approximately 250,000; in 1895, 3,955,110; in 1914, 7,885,237. For a total of fifty-nine years in which the statistics have been kept, the number of immigrants from Montevideo is 4,711,013. They were divided by nationality as follows:

Italians..............................	2,259,933
Spaniards..........................	1,492,848
French..............................	225,049
English.............................	56,448
Austrians..........................	81,186
Swiss...............................	33,326
Germans...........................	62,329
Belgians...........................	23,091
Russians...........................	135,962
Ottomans..........................	121,177
Other nationalities.................	189,664

For added information on the Argentine, see the *Statistical Book of the Argentine Republic*, 1915; *Argentine Geography*, published by Urien & Colombo; and Juan Alsina's *European Immigration to the Argentine.*

78 : 22. Philippines. The following figures were taken from the *New International Encyclopedia* and the *Statesman's Yearbook* for 1915. The size of the population was established in June, 1914.

Total population	8,650,937	
Native born	6,931,548	or 99.2%
Chinese	41,035	or 0.6%
Americans and Europeans	20,000	or 0.3%

The natives are mostly of the Malayan race with the exception of 25,000 Negrito tribesmen.

78 : 24. Dutch East Indies. The figures are taken from the census of 1905.

Total population is approximately	38,000,000
Europeans	80,910
Chinese	563,000
Arabs	29,000
Other Orientals	23,000

78 : 25. British India. The figures are from the census of 1911:

Total population.................. 315,156,396
(Of these 650,502 were not born in India.)

The remainder are divided according to the languages spoken:

East Asiatics	4,410,000
Tibeto-Chinese	12,970,000
Dravidian	62,720,000
Aryan	232,820,000
European	320,000

81 : 5. See Francis Parkman, *The Old Régime in Canada*, vol. II, pp. 12 and 13.

82 : 10. See Sir Harry Johnston, *The Negro in the New World*, p. 343.

83 : 8. See the *Genealogical Records of the Society of the Colonial Wars.*

84 : 6. See the notes to p. 38.

84 : 11 *seq.* A letter from Abraham C. Strite, a lawyer of Hagerstown, Maryland, contains additional information on the so-called Pennsylvania Dutch. Mr. Strite says: "They are not Palatine Germans, but largely Swiss who speak a dialect of German. The writer happens to be of this stock. Its characteristics are round head, black hair, dark brown eyes, stocky stature, brunet type, all clearly indicating, according to your analysis, an Alpine origin. This description fairly well averages up the prevailing Pennsylvania Dutch type of this section although there are some red heads and some blonds which would indicate a Nordic admixture, again meeting your argument. There are many other varieties of Teutons in this section, but I am confining my remarks to the class known as the Pennsylvania Dutch. I have never made any head measurements among them but I am of the opinion that the round-headed type vastly predominates. The ancestors of these people emigrated from southern Europe, mostly Switzerland, in quite some numbers between the years 1700 and 1775, and settled in Lancaster County, Pa.; from thence they have spread out over the adjoining sections of Pennsylvania, down through the Cumberland valley and into the valley of Virginia, and today they form an important element of the population. They are the organizers in America of the religious sect known as the Mennonites.

"The early settlers of Germantown who were Mennonites, were of Palatine stock. Of this there can be no doubt. Later immigration to Lancaster County, Pennsylvania, which constituted the bulk of the Pennsylvania Dutch stock will be found, I think, largely to have come from Switzerland, although not exclusively. Rupp's *30,000 Names of Immigrants to America* gives the names, dates and sailings of this Mennonite stock. Your conclusions are correct enough for all practical purposes but it seemed to me that the immigrants from Switzerland and from the Palatinate might be distinguished."

Doctor C. P. Noble, of Radnor, Pa., writes concerning the Pennsylvania Dutch: "I have seen much of them as patients and as I have observed them they have the medium stature and stocky build of the Alpines, also they have, usually, broad, round faces which are associated with brachycephaly and certainly they have always exhibited peasant traits. Moreover, it is unusual to find a blond among them."

Doctor Jordan, of the Pennsylvania Historical Society, furnished Doctor Noble with some data concerning them. That there were some Alpine elements among them will appear from what follows. Doctor Jordan agreed that the present-day Pennsylvania Germans are almost exclusively brunet, with stocky bodies of moderate height. Existing portraits of various leaders among them when they arrived in Pennsylvania showed the same types. Furthermore, Doctor Jordan's extensive reading of early documents relating to them tends to confirm the belief that the present-day descendants represent the original types. Tall blonds are very rare among them.

Doctor Noble knows some individuals with Nordic traits, but these were acquired by intermarriage with Anglo-Saxons. Most of these groups came from southern Germany, from Silesia on the east to the Palatinate on the west.

The following are Doctor Jordan's notes:

Moravians. They were located in Pennsylvania, at first in Bethlehem and later in Nazareth. The land in Nazareth was purchased of Whitfield, the predestinarian Methodist.

The Moravian immigration was carefully supervised. The church either owned or chartered the vessels which brought over the immigrants. Frequently it was definitely arranged as to how many artisans of each trade should come over so that they would prosper on arrival.

The Moravian immigration was small—about 500 up to 1750. Until about 1840 the Moravian settlements were closed towns—no non-Moravians could buy property.

Not one quarter of the present Moravians are descendants of the early settlers. The rest are converts or descendants of converts. A connection exists between the Moravians, Huss and his Protestant followers, and the Waldenses. A short résumé of this will be found in the *Encyclopædia Britannica*—under Huss and Moravians—from the world standpoint.

Moravians migrated from Bohemia to Saxony and were protected by Count Zinzendorf—a liberal Lutheran—and lived on his estates. He assisted in their migration to Pennsylvania. Some went to Georgia and later to Pennsylvania.

Schwenkfelders. These were the followers of Kaspar Schwenkenfeld (1490–1561). See the *Encyclopædia Britannica* for a short account. They formed a sect in Silesia which has persisted. In 1720 a commission of Jesuits was sent to convert them by force. Most of them fled into Saxony and were protected by Count Zinzendorf. From thence they migrated to Holland, England and Pennsylvania. Frederick the Great, when he seized Silesia, protected those remaining there.

Ursinus College, Collegeville, is Schwenkfelder. The sect is not large and was located in or around Montgomery County. Their migration to Saxony and also to Pennsylvania antedated that of the Moravians. Generally speaking, they have been much more aggressive and vigorous than the Moravians.

The Dunkards, Mennonites, Amish, and Seventh Day Baptists (Wissahickon and Ephrata, Pennsylvania), came from south Germany and the Palatinate.

The Harmony Society, small in numbers, the Lutherans and German Reformed, came largely from south Germany and the Palatinate, but also from other parts of Germany. The Lutherans and the Reformed were the large sects in Pennsylvania.

Germans from the Hudson valley migrated to Berks County around Reading. The Swedes in New Jersey were almost exclusively below Philadelphia—from Gloucester down the Delaware River. Before the Revolution there were about 30,000 Germans in Pennsylvania, out of a total estimated population of 100,000 to 120,000.

84 : 16. Scotch-Irish. See *The Scotch-Irish in America*, by Henry Jones Ford; and also Sir George Trevelyan on the Irish Protestants in chap. XI, vol. II, of *George III and Charles Fox.*

87 : 24. In this connection it is interesting to note that an early Egyptian king said almost the same concerning the negroes of his time. The quotation is taken from Hall's *Ancient History of the Near East*, pp. 161–162, and is a translation of a portion of the manifesto of Senusert III, of the XIIth dynasty, which he caused to be set up at the time of the Nubian wars: "Vigor is valiant, but cowardice is vile. He is a coward who is vanquished on his own frontier, since the negro will fall prostrate at a word; answer him, and he retreats; if one is vigorous, he turns his back, retiring even when on the way to attack. Behold, these people have nothing terrible about them; they are feeble and insignificant; they have buttocks for hearts. I have seen it, even I, the majesty; it is no lie. . . ."

88 : 9. Barrett Wendell, *A Literary History of America*, chap. III.

88 : 28. The belief in the approximation of the Anglo-Saxon in America to the Amerindian is wide-spread, but is entirely without justification, scientific or otherwise.

89 : 1. Hall, *Immigration Restriction and World Eugenics*, and especially his *Immigration*, pp. 107–112.

91 : 1. Hall, 2.

94 : 1. Beddoe, 5, p. 416. For similar conclusions see DeLapouge, *passim;* G. Retzius, 3; and Roese, *Beiträge zur Europäischen Rassenkunde.* Fleure and James, pp. 125 and 151–152 make similar observations.

PART II

EUROPEAN RACES IN HISTORY

CHAPTER I. EOLITHIC MAN

97 : 10. Osborn, 1, the tables on pp. 18 and 41.

98 : 15. Galton, pp. 309–310; Woods, 1, chap. XVIII.

99 : 5–10. *A Statistical Study of American Men of Science,* J. McKeen Cattell, especially *Science,* vol. XXXII, no. 828, pp. 553–555.

99 : 22. The authorities quoted by J. B. Bury in his *History of Greece* are complete and concise. In chap. I he discusses the Dorian conquest from p. 57 forward, and the Homeric Mycenæan period (1600–1100 B. C.) from p. 20. A very interesting instance of the truth of the picture of Mycenæan culture as drawn by Homer occurs on p. 50, where it is stated that much described by the poet, even to small articles, has been unearthed during archæological investigations. "Although the poets who composed the Iliad and Odyssey probably did not live before the ninth century, they derived their matter from older lays."

99 : 27. Crete. For systems of Cretan writing see Sir Arthur J. Evans, *Cretan Pictographs and Pre-Phœnician Script, Further Discoveries of Cretan and Ægean Script, Reports of Excavations at Cnossus, Prehistoric Tombs of Knossos,* and *Scripta Minoa.* That the aboriginal "Eteocretan" language existed until historic times is attested by the discoveries of later inscriptions belonging to the fifth and succeeding centuries B. C., which were written in Greek letters at this time but in the indigenous, undecipherable tongue. They are described by Comparetti, *Mon. Ant.,* III, pp. 451 *seq.,* and by R. S. Conway, 2, 3, especially pp. 125 *seq.,* in vol. VIII. In 1908 another discovery was made by the Italian Mission at Phæstus, of a clay disk with printed hieroglyphics which did not belong to the Cretan system of writing. It is supposed to have come from Asia Minor.

For other discoveries in Crete and other authorities see R. M. Burrowes, C. H. and H. B. Dawes. On Cretan pottery see Sir Duncan Mackenzie, 2, and Sir Arthur Evans, 2. Sir Duncan Mackenzie also has a book on the Cretan palaces. Bury, in his *History of Greece*, pp. 9 *seq.*, gives a brief description of Crete as revealed by archæologists. According to them, the palaces of Cnossus and Phæstus were erected before 2100 B. C., when Cretan civilization was well advanced. See also the note to p. 119 : 1 of this book.

99 : 28. Azilian period. See p. 115 of this book.

100 : 20 *seq.* Osborn, 1, p. 49 *seq.*, and the note VII of the appendix. See also the notes to p. 13 of this book.

100 : 28. Progressive dessication. Ellsworth Huntington, 2.

101 : 5. Arboreal Man. See the work of W. K. Gregory, especially 3, p. 277; and John C. Merriam, pp. 203 and 206–207.

101 : 12. Osborn, 1, note VII, p. 511, of the appendix; and Merriam, pp. 205–208.

101 : 15. J. Pilgrim, *The Correlation of the Siwaliks with Mammal Horizons of Europe.*

101 : 21. Java and the Pithecanthropus erectus. Dubois, E. Fischer, and particularly G. Schwalbe. For the land connection of Java with the mainland see Alfred Russel Wallace's *Island Life*, and *The Geography of Mammals*, by W. L. and P. L. Sclater.

101 : 27. Gunz glaciation. See Osborn's table of Geologic Time, in 1, p. 41. The date given here is that made by Penck.

102 : 1. W. D. Matthew, *Revision of the Lower Eocene Primates*, and W. K. Gregory, *The Evolution of the Primates.*

102 : 13. Schoetensack, *Der Unterkiefer des Homo Heidelbergensis aus den Sanden von Mauer bei Heidelberg im Beitrag zur Paläontologie des Menschen.*

102 : 21. At the beginning of this Eolithic period wood was used for clubs and probably as levers along with the chance flints. Perhaps it was employed even earlier, but of course no remains would come down to us.

CHAPTER II. PALEOLITHIC MAN

For the material in this chapter the authorities, such as Cartailhac, Boule, Breuil, Obermaier and Rutot are all given in Osborn, 1, together with useful discussions of the evidence. In special instances additional sources are inserted here.

105 : 17. Piltdown Man. See Charles Dawson, the discoverer, 1, 2 and 3. There is a tremendous bibliography on the Piltdown Man.

106 : 1. *The Jaw of the Piltdown Man*, Gerrit S. Miller. From a later paper by Mr. Miller (2) we quote the following from pp. 43–44:

"The combined characters of the jaw, molars and skull were made the basis of a genus Eoanthropus, placed in the family Hominidæ. . . . While the brain case is human in structure, the jaw and teeth have not yet been shown to present any character diagnostic of man; the recognized features in which they resemble human jaws and teeth are merely those which men and apes possess in common. On the other hand, the symphyseal region of the jaw, the canine tooth and the molars are unlike those known to occur in any race of men. . . . Until the combination of a human brain case and nasal bones with an ape-like mandible, ape-like lower molars and an ape-like upper canine has actually been seen in one animal, the ordinary procedure of both zoology and paleontology would refer each set of fragments to a member of the family which the characters indicate. The name Eoanthropus dawsoni has therefore been restricted to the human elements of the original composite (Family Hominidæ), and the name Pan vetus has been proposed for the animal represented by the jaw (Family Pongidæ)."

See also *The Dawn Man of Piltdown, England*, by W. K. Gregory. Ray Lancaster has made some interesting observations and is the most recent authority on this subject.

106 : 14. On the Neanderthal Man see Osborn and his authorities.

107 : 21. A note on p. 385 of Rice Holmes's *Ancient Britain* is useful in this connection. "MM. de Quatrefages and

Hamy affirm that the Neanderthal race has left a permanent imprint on the population, and refer to various skulls of the Neolithic and later periods which resemble more or less closely that of Neanderthal. Moreover, it is generally admitted that even at the present day a few individuals here and there belong to the same type. But it does not follow that these persons to whom Dr. Beddoe and M. Hamy refer were descended from men who lived in Britain in the Paleolithic age."

Taylor, *Origin of the Aryans*, mentions several famous men who had typical Neanderthal skulls, among them Robert Bruce.

108 : 1 *seq.* Beddoe, 4, pp. 265–266; Ripley, pp. 326–334, but especially pp. 266, 330–331.

108 : 16. Alés Hrdlička, *The Most Ancient Skeletal Remains of Man*, considers the Neanderthal type extinct, as do Keith, *Antiquity of Man*, *passim*, and A. C. Haddon. Consult Barnard Davis, *Thesaurus Craniorum*, especially p. 70, and Beddoe, 2, as well as Osborn, 1, p. 217.

108 : 18. Firbolgs. See the note above to line 1; also Taylor, *Origin of the Aryans*, p. 78.

109 : 8. Broca, according to Osborn, is responsible for this theory.

109 : 17 *seq.* See pp. 329 *seq.* of Galton's *Hereditary Genius*.

110 : 8. In Dordogne, France, there are people who look as it is thought the Cro-Magnons did. These modern people may belong to that type in the same way that here and there people resembling the Neanderthals are still found. In Dordogne these Cro-Magnon features are quite common, and differ markedly from those of other Frenchmen. For studies of this type see Collignon, 1. For full discussions of the ancient Cro-Magnons see Keith, 1 and 2, and Osborn, 1.

110 : 11. Dr. Charles B. Davenport, in correspondence, remarks: "There can be no doubt that the prolific shall inherit the earth or the proletariat shall inherit the earth, which is etymologically the same thing. We see this law in action in Russia today. . . . Can we build a wall high enough around this country, so as to keep out these cheaper races, or will it be only a feeble dam which will make the flood all

the worse when it breaks? Or should we admit the four million picks and shovels which many of our capitalists are urging Congress to admit in order to secure what wealth we can for the moment, leaving it for our descendants to abandon the country to the blacks, browns and yellows, and seek an asylum in New Zealand? I am inclined to think that the thing to do is to make better selection of immigrants, admitting them in fairly large numbers so long as we can sift out the defective strains."

111 : 20 *seq.* É. Cartailhac says, in *La France préhistorique:* "The race of Cro-Magnon is well determined. There is no doubt about their high stature and Topinard is not the only one who believes that they were blonds." See also G. Retzius, 3. But he derives the Nordics from them. On the other hand, the Dordogne people to-day are dark, and many anthropologists are inclined to the belief that the Cro-Magnons were brunets, a theory in which the writer heartily concurs.

112 : 1. L'Abbé H. Breuil, *Les subdivisions du paléolithique supérieur et leur signification*, pp. 203–205. Other writers such as Nilsson and Dawkins have also held this theory.

112 : 21. One of the few references to the bare possibility of a Magdalenian dog occurs in Obermaier's *El Hombre Fósil*, the footnote on pp. 221 and 223. From this it appears that certain conclusions are drawn that if the Alpera paintings are of late Magdalenian age, if certain nondescript animals in those paintings are intended for dogs and if those dogs are meant to be in a state of domestication, then there can be no doubt whatever that the dog was domesticated in Magdalenian times. But Obermaier does not feel that this furnishes satisfactory proof.

112 : 25–p. 113. Bow and Arrow. Obermaier, 1, chap. V, *The Upper Paleolithic*, p. 112, says: "The coarse stone implements of the lower Paleolithic no longer exist, being replaced by an industry of very fine flints and . . . certain lances with points made of bone, horn or ivory, which were very generally used. The use of the bow is proved by certain representations in mural pictures (*i. e.*, the Archers of Alpera, etc., eastern Spain, Magdalenian; Archer of Laussel,

France, Aurignacian)." See the corresponding plates in chap. VII.

On p. 217 of chap. VII, *Quaternary Art*, there is a man depicted in the pose of an archer. On p. 239 Obermaier says: "Among . . . [the paintings of Alpera] are sketches of more than 70 human figures, . . . 13 are shown in the act of shooting an arrow at other men or animals." * On p. 241 he continues: "The paintings of eastern Spain of Quaternary age also show archers." A recent letter from the Abbé Henri Breuil says that the bow and arrow did not exist in France in Paleolithic times, and he is, of course, aware of the Laussel figure found by Lalanne and referred to by Obermaier as proof. Alpera is agreed by Obermaier to be of Tardenoisian age, consequently of the transition period to the Neolithic. Beside Alpera, the only other instance of pictured bows and arrows noted occurs at Calpatá, said to be of Upper Paleolithic age and Capsian industry.

See Fig. 174, p. 353, of Osborn, 1, giving a large bison drawing in the cavern of Niaux on the Ariège, showing the supposed spear or arrow-heads, attached to large shafts, which are represented as having pierced its side. On p. 354 Osborn says: "It is possible, although not probable, that the bow was introduced at this time and that a less perfect flint point, fastened to a shaft like an arrowhead, and projected with great velocity and accuracy, proved to be far more effective than the spear. . . . From these drawings and symbols (Fig. 174), it would appear that barbed weapons of some kind were used in the chase, but no barbed flints occur at any time in the Paleolithic, nor has any trace been found of bone barbed arrowheads, or any direct evidence of the existence of the bow." On p. 410: "Here [Cavern of Niaux] for the first time are revealed the early Magdalenian methods of hunting the bison, for upon their flanks are clearly traced one or more arrow or spear heads with the shafts still attached; the most positive proof of the use of the arrow is the apparent termination of the wooden shaft in the feathers which are rudely represented in three of the drawings."

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* If the Alpera paintings are of this (Magdalenian?) period, then the bow certainly existed at this time, but there is reason to believe that the paintings belong to a later epoch.

113 : 3. Osborn, p. 456: "The flint industry [of the Azilian] continues the degeneration begun in the Magdalenian and exhibits a new life and impulse only in the fashioning of extremely small or microlithic tools and weapons known as 'Tardenoisian.'" See also pp. 465–475 for a more complete discussion and their distribution as traced by de Mortillet. Also Breuil, 2, pp. 2–6, and 3, pp. 165–238, but especially pp. 232–233.

Osborn continues, p. 450: "If it is true . . . that Europe at the same time became more densely forested, the chase may have become more difficult and the Cro-Magnons may have begun to depend more and more upon the life of the streams and the art of fishing. It is generally agreed that the harpoons were chiefly used for fishing, and that many of the microlithic flints, which now begin to appear more abundantly, may have been attached to a shaft for the same purpose. We know that similar microliths were used as arrowpoints in pre-dynastic Egypt."

The microliths may have been used on darts for bird hunting.

113 : 21. See Osborn, pp. 333 *seq.*, and in this book the note to p. 143 : 13 on the Tripolje culture.

115 : 9. Compare what Rice Holmes has to say on pp. 99–100 of his *Ancient Britain.*

117 : 18. Maglemose. This culture was first found and described by G. F. L. Sarauw, in a work entitled *En Stenolden Boplads: Maglemose ved Mullerup.* The same material is given in "Trouvaille fait dans le nord de l'Europe datant de la période de l'hiatus," in the *Congrès prêhistorique de France.* A site equivalent to the Maglemose in culture, but discovered later, is described in "Une trouvaille de l'ancien âge de la pierre" (Braband), by MM. Thomsen and Jessen. See also Obermaier, 2, pp. 467–469.

117 : 23. The Abbé Breuil, *Les peintures rupestres d'Espagne* (with Serrano Gomez and Cabre Aguilo), IV, "Les Abris del Bosque à Alpéra (Albacete)" says: "Other peoples known at present only from their industries, were advancing

toward the close of the Upper Paleolithic along the northern and southern shores of the Baltic and persisted for an appreciable time before the arrival of the tribes introducing the early Neolithic-Campignian culture which accumulated in the Kitchen Middens along the same shores. Like the southern races of the Azilian-Tardenoisian times these northerly tribes were truly Pre-Neolithic, ignorant of both agriculture and pottery; they brought with them no domesticated animals excepting the dog, which is known at Mugem, at Tourasse and at Oban, in northwestern Scotland."

CHAPTER III. THE NEOLITHIC AND BRONZE AGES

119 : 1. See the Osborn tables. As evidence of far earlier dates of the Neolithic in the east we may quote Sir A. J. Evans, 2, p. 721. He calculates that the earliest settlement at Knossos in Crete, which was *Neolithic*, is about 12,000 years old, for he assumes that in the western court of the palace the average rate of deposit was fairly continuous. Professor Montelius, in *L'Anthropologie*, t. XVII, p. 137, argues from the stratigraphy of finds at Susa that the beginning of the Neolithic Age in the east may be dated about 18,000 B. C.

119 : 6. See the note to p. 147.

119 : 15. Balkh. Balkh, in Afghanistan, was the capital of Bactria, the ancient name of the country between the range of the Hindu Kush and the Oxus, and is now for the most part a mass of ruins, situated on the right bank of the Balkh River. The antiquity and greatness of the place are recognized by the native populations who speak of it as the "Mother of Cities," and it is certain that at a very early date it was the rival of Ecbatana, Nineveh, and Babylon.

Bactria was subjugated by Cyrus and from then on formed one of the satrapies of the Persian Empire. Zaborowski, 1, p. 43, says: "After the conquests of Alexander there was founded a Greco-Bactrian kingdom . . . which embraced Sogdiana, Bactria and Afghanistan. The Greco-Bactrian kings struck a quantity of coins. They bore a double legend, the one Greek, the other still called Bactrian, which is not Zend, nor even the language really spoken in Bactria. It is a popular dialect derived from Sanskrit." Again on p. 185: "Zend has been called, and is still called, Bactrian or Old Bactrian, it may be because Bactria has been conceived as the original country or an ancient place of sojourn of the Persians; it may be because Zoroaster, a Median Magus, had, according to a legend, fled to the Bactrians where he found protection under Prince Vishtaspa. Eulogy of this prince is often incorporated in the sayings of Zoroaster."

Later a new race appeared, tribes called Scythians by the Greeks, amongst which the Tochari, identical with the Yuë-Chih of the Chinese, were the most important. According to Chinese sources, they entered Sogdiana in 159 B. C.; in 139 they conquered Bactria, and during the next generation they had made an end to the Greek rule in eastern Iran. In the middle of the first century B. C. the whole of eastern Iran and western India belonged to the great "Indo-Scythian" Empire. In the third century the Kushan dynasty began to decline; about 320 A. D. the Gupta Empire was founded in India. In the fifth the Ephtalites, or "White Huns," subjugated Bactria; then the Turks, about A. D. 560, overran the country north of the Oxus. In 1220 Jenghis Khan sacked Balkh and levelled all buildings capable of defence, while Timur repeated this treatment in the fourteenth century. Notwithstanding this, Marco Polo could still, in the following century, describe it as "a noble city and a great."

See also Raphael Pumpelly, *Explorations in Turkestan*, where 10,000 years is said to be the age of the remains of early civilization. More modern authorities, however, do not accept these ancient dates.

119 : 21. Osborn, 1, p. 479.

120 : 1 *seq.* Osborn, 1, pp. 493–495; Ripley, pp. 486–487, and also S. Reinach, 3, and G. Sergi, 2, pp. 199–220.

120 : 28 *seq.* Oman, *England before the Norman Conquest*, pp. 642 *seq.*, says: "The position which he [Harold] chose is that where the road from London to Hastings emerges from the forest, on the ground named Senlac, where the village of

Battle now stands. . . . This hill formed the battleground. . . . On reaching the lower slopes of the English position the archers began to let fly their shafts, and not without effect, for as long as the shooting was at long range, there was little reply, since Harold had but few bowmen in his ranks, (the Fyrd, it is said, came to the fight with no defensive weapons but the shield, and were ill-equipped, with javelins and instruments of husbandry turned to warlike uses), and the abattis, whatever its length or height, would not give complete protection to the English. But when the advance reached closer quarters, it was met with a furious hail of missiles of all sorts—darts, lances, casting axes, and stone clubs such as William of Poictiers describes, and the Bayeux Tapestry portrays—rude weapons, more appropriate to the neolithic age. . . . Many a moral has been drawn from this great fight. . . . Neither desperate courage, nor numbers that must have been at least equal to those of the invader, could save from defeat an army which was composed in too great a proportion of untrained troops, and which was behind the times in its organization. . . . But the English stood by the customs of their ancestors, and, a few years before, Earl Ralph's attempt to make the thegnhood learn cavalry tactics (see the Anglo-Saxon Chronicle), had been met by sullen resistance and had no effect."

121 : 4. See the note to p. 128 : 2.

121 : 15. F. Keller, *The Lake-Dwellings of Switzerland and Other Parts of Europe;* Schenck, *La Suisse préhistorique*, pp. 533–549; G. and A. de Mortillet, *Le Préhistorique*, part 3, and Munro, *The Lake Dwellings of Europe.* The lake-dwelling, known as Pont de la Thièle, between the lakes of Bienne and Neufchâtel, according to Grilliéron's calculations, is dated 5000 B. C. See Keller, p. 462; Lyell, *Antiquity of Man*, p. 29; Avebury, *Prehistoric Times*, p. 401; and De Mortillet, *Le Préhistorique*, p. 621.

121 : 17. Schenck, p. 190, says concerning Switzerland: "There were three [cultural] stages, stone, bronze, and iron. . . . On the other hand, from the anthropological point of view, this subdivision can also be made. In the first stage [Neolithic Lacustrian], we find only brachycephalic crania;

in the second there are an almost equal number of brachycephalic and dolichocephalic; in the third there is a predominance of dolichocephalic" (that is, Schenck divides the Neolithic into three periods according to skulls, and the last runs into the age transitionary to bronze).

See also G. Hervé, *Les populations lacustres*, p. 140; His and Rütimeyer, *Crania Helvetica*, pp. 12, 34, etc.; and the note on p. 275 of Rice Holmes's *Cæsar's Conquest of Gaul.* Ripley gives useful and concise discussions on pp. 120, 471, 488 and 501.

121 : 19. See both Keller and Schenck for the numbers of dwellings.

121 : 22. *There were, of course, the caves and rock shelters used during a large part of the year, but probably no other regularly constructed dwellings served as permanent, all-the-year-round places of abode prior to the lake dwellings, and it is doubtful if these were inhabited in winter. It is generally believed that the custom of building pile villages arose from considerations of safety. This protection would be absent when the lakes were frozen over, and at the same time the huts would be exposed on all sides, including the floor, to the wintry blasts sweeping the lakes. They would in this way be rendered practically uninhabitable during the winter season.*

Keller declares that the same type of dwelling is found in the whole circle of countries which were formerly Celtic. (Introduction, p. 2.) The Crannoges of Scotland and Ireland continued in use until the age of iron in those countries. In Switzerland the lake-dwellings disappeared about the first century (p. 7). The population was numerous (p. 432), large enough to have to depend upon cattle and agriculture (p. 479).

This type of dwelling is found from Ireland to Japan, and even in South America. Many lake-dwellings exist at the present day. The Welsh, Scotch and Irish Crannoges are related in structure to the European fascine types (Keller, p. 684 and Introduction). Others are built somewhat differently, and are, of course, of independent origin. An ancient site was unearthed at Finsbury, on the outskirts of London not long since, where there used to be a marsh.

The inhabitants of this lake-dwelling were native outcasts during Romano-British times.

121 : 26. See Schenck, and Keller, p. 6. On p. 140 of Keller we read: "The Pile Dwellings of eastern Switzerland ceased to exist before the bronze age or at its beginnings; those of western Switzerland came to their full development during this period." On p. 37, describing the settlement of Mooseedorfsee Keller says: "A very striking circumstance ought to be mentioned, namely, that even heavy implements, such as stone chisels, grinding or sharpening stones, etc., were found quite high in the relic bed, while lighter objects, such as those made out of bone, were met with much deeper." It is known that the Mooseedorfsee settlement is very old. No metal has been found here, but a bone arrow-head is described by Keller on p. 38. He remarks that the bones of very large animals were uncommonly numerous. It seems as if the earlier inhabitants were users of bone rather than of stone implements.

122 : 1. Herodotus, V, 16 describes them. He also is the source of our information regarding the keeping of cattle, although archæological finds have proved the location of stables out on the platforms between the houses. His interesting account is given herewith: "Their manner of living is the following. Platforms supported upon tall piles stand in the middle of the lake, which are approached from land by a single narrow bridge. At the first the piles which bear up the platforms were fixed in their place by the whole body of the citizens, but since that time the custom which has prevailed about fixing them is this: they are brought from a hill called Orbêlus, and every man drives in three for each wife that he marries. Now the men all have many wives apiece; and this is the way in which they live. Each has his own hut, wherein he dwells, upon one of the platforms, and each has also a trap door giving access to the lake beneath; and their wont is to tie their baby children by the foot with a string, to save them from rolling into the water. They feed their horses and their other beasts upon fish, which abound in the lake to such a degree that a man has only to open his trap door and to let down a basket by a

rope into the water and then to wait a very short time, when he draws it up quite full of them. The fish are of two kinds, which they call the paprax and the tilon."

122 : 3. In the Introduction, p. 2, and elsewhere Keller says regarding cattle: "Cattle were kept, not on land, as in the Terramara region, but on the platforms themselves, out in the lakes. Many charred remains of stables and stable refuse have been taken from the lakes, but only from certain parts of the sites, between those of the houses." See also Schenck, p. 188.

Rice Holmes, pp. 89–90 of *Ancient Britain*, says of that country that agriculture was limited in the Neolithic, but flourished in the Bronze Age.

122 : 14. The Terramara Period. Keller, pp. 378 *seq.* As related to Switzerland, pp. 391, 393. For swamp and river bank sites, pp. 391, 397 *seq.* For bronze in Terramara settlements, p. 386. For the Upper Robenhausian, see Schenck, p. 190, and Montelius, *La civilisation primitive en Italie.* Peet, *The Stone and Bronze Ages in Italy*, and Munro, *The Lake Dwellings of Europe* and *Palæolithic Man and the Terramara Settlements* must also be read in this connection. Schwerz, *Volkerschaften der Schweiz*, gives, for the average cranial indices of the Lake Dwellers, 79 during the Stone Age, 75.5 in the Copper Age, and 77 in the Bronze Age. Of these last 14 per cent only were brachycephalic, 20 per cent were extremely long-headed. In the Iron Age 46 per cent were brachycephalic. Consult also Deniker, 2, p. 316.

122 : 21. Ripley, pp. 502–503; Sergi, 2; Robert Munro, 2; Peet, 2.

122 : 27–123 : 4. See the note to p. 117 : 18.

123 : 5. On the Kitchen Middens, see especially Madsen, Sophus Müller and others in *Affaldsdynger fra Stenaldern i Danmark.*

123 : 12. Salomon Reinach, 3 and 5; Deniker, 2, p. 314; and Peake, 2, p. 156, where we find the following: "Over the greater part of Sweden,—all, in fact, except a strip of coast-line on the western side of Scania,—and all along the shore of the Baltic from the Gulf of Bothnia southwards and west-

wards as far as a point midway between the Vistula and the Oder, there are found abundant remains of a primitive civilization which dates from the Neolithic Age, and indeed, from early in that age. This civilization, known as the East Scandinavian or Arctic culture, extended, perhaps later, over the whole of Norway."

Consult the notes to pp. 125 : 4 *seq.* for western trade.

123 : 20. Sergi, 4; Beddoe, 4, pp. 26, 29; Fleure and James, pp. 122 *seq.*

123 : 23. Paleolithic Population. Fleure and James, *Anthropological Types in Wales*, p. 120. Rice Holmes, *Ancient Britain*, p. 380, says they were confined to the South. No Paleolithic implements were found north of Lincoln, or at least of the East Riding of Yorkshire.

123 : 26. John Munro, *The Story of the British Race*, p. 45; Rice Holmes, *Ancient Britain*, p. 68; and Fleure and James, pp. 40, 69–74, 122 *seq.*

124 : 4. For the Alpines see pp. 134 *seq.* of this book.

124 : 9. Consult the note to p. 143 on this subject.

124 : 15. On the Nordics see pp. 167 *seq.* and 213 *seq.* On the Scandinavian blonds see the note to p. 20 : 5.

124 : 20. See the notes to pp. 168 *seq.*

125 : 1. G. Elliot Smith, *The Ancient Egyptians*, especially pp. 146 and 149 *seq.;* Breasted, 1, 2 and 3; Keane, *Ethnology*, pp. 72 *seq.;* Sophus Müller, *L'Europe préhistorique*, p. 49; Hall, *Ancient History of the Near East*, p. 3.

125 : 4. Deniker, 2, pp. 314–315: "The great trade route for amber, and perhaps tin, between Denmark and the Archipelago is well known at the present day; it passes through the valley of the Elbe, the Moldau and the Danube. The commercial relations between the north and the south explain the similarities which archæologists find between Scandinavian bronze objects and those of the Ægean district."

See also E. H. Minns, *Scythians and Greeks*, for trade in the East, via the Vistula, Dnieper and Danube, pp. 438–446, 458, 459, 465, 493, etc.; and Déchellette, *Manuel d'Archéologie*, t. I, p. 626, and II, p. 19. Herodotus IV, 33, gives the trade route from the Hyperboreans to Delos. Félix Sartiaux, *Troie, La Guerre de Troie,* pp. 162, 181, also discusses the trade routes for amber.

125 : 7. Amber. Tacitus, *Germania:* "They [the tribes of the Æstii] ransack the sea also and are the only people who gather in the shallows and on the shore itself the amber which they call in their tongue 'glæsum.' Nor have they, being barbarians, inquired or learned what substance or process produces it; nay, it lay there long among the rest of the flotsam and jetsam of the sea, until Roman luxury gave it a name. To the natives it is useless; it is gathered crude, it is forwarded to Rome unshaped; they are astonished to be paid for it. Yet you may infer that it is the exudation of trees: certain creeping and even winged creatures are continually found embedded; they have been entangled in its liquid form and as the material hardens, are imprisoned. I should suppose, therefore, that, just as in the secluded places of the East, where frankincense and balsam are exuded, so in the islands and lands of the West, there are groves and glades more than ordinarily luxuriant," etc.

Amber, if rubbed, has magnetic qualities and develops electricity. Our word "electricity" is derived from its Greek name, "electron." Tacitus says: "If you try the qualities of amber by setting fire to it, it kindles like a torch and soon dissolves into something like pitch and resin."

125 : 13. Gowland, *Metals in Antiquity,* pp. 236, 252 *seq.*

125 : 15 *seq.* Copper. Reisner's opinion that the predynastic Egyptians invented the use of copper (*Naga-ed-Dêr,* I, p. 134) which is followed by Elliot Smith (*Ancient Egyptians,* p. 3), is not the view held by all scholars. Hall believes that the knowledge of the use of metal came to the prehistoric southern Egyptians (*Ancient History of the Near East,* p. 90), toward the end of the pre-dynastic age from the north. But he counts the Mount Sinai and Cyprus deposits as northern centres of origin from which a knowledge of the working of the metal radiated.

The mines of the Sinaitic peninsula were worked for copper at the time of Seneferu, about 3733 B. C., and probably much earlier (Gowland, p. 245, and elsewhere), "but long before the actual mining operations were carried on, how long it is impossible to say, the metal must have been obtained by primitive methods from the surface ore. It is hence not unreasonable to assume that at least as early as about 5000 B. C. the metal copper was known and in use in Egypt." The same writer believes "that an earlier date than 5000 B. C. should be assigned to the first use of copper in the Chaldean region." In this he bases himself on the discovery of copper figures associated with bricks and tablets bearing the name of King Ur-Nina (about 4500 B. C.), and the fact that the upper Tigris region is known to contain rich deposits of the mineral. Jastrow, Jr., assigns the date of 3000 B. C. to Ur-Nina, which may be more correct. Gowland dates copper in Cyprus at 2500 B. C., or even 3000, judging by the finds at Crete dated 2500 B. C. In the Troad he thinks it was used not later than in Cyprus. For China the date is unknown, but if we accept 2205, given in the Chinese annals as the time when the nine bronze caldrons were cast, which are often mentioned in the historical records, then copper may have been in use as early as 3000, or even earlier. De Morgan dates copper at 4400 B. C. in Egypt, where it was found in the supposed tomb of Menes.

See also Lord Avebury, *Prehistoric Times*, pp. 71–72, who gives 3730 for copper-working in Sinai, and its first appearance about 5000 B. C. Montelius, 1, p. 380, gives copper in Cyprus as about 2500 B. C., hardly 3000; and for Egypt 5000; he regards it as having been known in Babylon at about the same time. Breasted, *Ancient Times*, assigns the date of the earliest copper as at least 4000 in Egypt.

125 : 27. Eduard Meyer, 1, p. 41. But *cf.* Reisner, *Naga-ed-Dêr*, I, p. 126, note 3. Also Hall, *Ancient History of the Near East*, p. 28.

126 : 1. Elliot Smith, 1, p. 8: "Most serious scholars who concern themselves with the problems of the ancient history of Egypt and Babylonia have now abandoned these inflated estimates of the lengths of the historical periods in the two empires; and it is now generally admitted that Meyer's estimate of 3400±100 B. C. is a close approximation to the date of the union of Upper and Lower Egypt and that the blending of Semitic and Sumerian cultures in

Babylonia took place shortly after the time of this event in the Nile valley." See also Hall, *Ancient History of the Near East*, p. 3.

126 : 7. Bronze. Rice Holmes, 1, p. 125: "The oldest piece of bronze that has yet been dated was found at Medûm, in Egypt, and is supposed to have been cast about 3700 B. C. But the metal may have been worked even earlier in other lands; for a bronze statuette and a bronze vase, which were made twenty-five centuries before our era have been obtained from Mesopotamia and the craft must have passed through many stages before such objects could have been produced. Yet it would be rash to infer that either the Babylonians or the Egyptians invented bronze for neither in Egypt nor in Babylonia is there any tin. The old theory that it was a result of Phœnician commerce with Britain has long been abandoned and British bronze implements are so different from those of Norway and Sweden, Denmark and Hungary, that it cannot have been derived from any of these countries. German influence was felt at a comparatively late period, but from first to last British bronze culture was closely connected with that of Gaul and through Gaul with that of Italy."

126 : 9. Gowland, p. 243: "It has been frequently stated that the alloy used by the men of the Bronze Age generally consists of copper and tin in the proportions of 9 to 1. I have hence compared the analyses which have been published with the following results:

EARLY WEAPONS AND IMPLEMENTS. 57 ANALYSES

In 25 the tin ranges from about 8 to 11 per cent.
" 6 " " " " " 11 " 13 " "
" 26 " " " " " 3 " 8 " "

LATER PALSTAVES AND SOCKETED AXES. 15 ANALYSES

In 13 the tin ranges from about 4.3 to 13.1 per cent.
" 2 " " was about 18.3 per cent.

SPEAR AND LANCE HEADS

In 5 the tin ranges from about 11.3 to 15.7 per cent.

STILL LATER. SWORDS. 33 ANALYSES

In 14 the tin ranges from about 8 to 11 per cent.
“ 12 “ “ “ “ “ 12 “ 18 “ “
“ 7 “ “ is less than 9 per cent.

“It is obvious, therefore, that these statements do not accurately represent the facts. And if we consider the different uses to which the implements or weapons were put, it is evident that no single alloy could be equally suitable for all. . . . It is worthy of note that these proportions (*i. e.*, different hardnesses for different implements) appear to have been frequently attained, and for this the men of the later Bronze Age are deserving of great credit as metallurgists and workers in metal.”

On the percentages of tin with copper for bronze see also Montelius, 1, pp. 448 *seq.*

126 : 12. Schenck, p. 241, describes a copper axe exactly like those of polished stone, and another of bronze, of very primitive pattern, showing that these were copied from the earlier stone models.

Some authorities think that iron, in Egypt at least, came in about the same time as bronze, or even earlier. Certain peoples missed altogether one or another of these stages, as the absence of remains indicates. For instance, the central Africans had, as far as is known, no bronze age, but passed directly from the use of stone to that of iron. (See Rice Holmes, *Ancient Britain*, p. 123.) See the notes to p. 129 on the value of iron. Occasional implements of any material better than that ordinarily in use, which had been introduced by trade or acquired by fighting, were very highly prized. Any books on primitive peoples contain references to the value of such “foreign tools.”

126 : 24. Diodorus Siculus, V. Consult *Crania Britannica*, by Davis and Thurnam, the chapter on the “Historical Ethnology of Britain,” for evidence that the Phœnicians did have intercourse with Britain. For a full discussion of this disputed question see pp. 483–514 in Rice Holmes’s *Ancient Britain*. Herodotus and other early writers allude to the fleets of the Phœnicians, and of course the voyage of Pythias

about the last half of the fourth century B. C. was undertaken to discover the source of the Phœnician tin. See Holmes's *Britain*, pp. 217–226; D'Arbois de Jubainville, *Les premiers habitants de l'Europe*, vol. I, chap. V; Hall, *Ancient History of the Near East*, pp. 158, 402–403; and G. Elliot Smith, *Ancient Mariners*, on the Phœnicians.

On pp. 251–252 of *Ancient Britain*, Rice Holmes makes the suggestion that the export of tin from Britain may have died down by Roman times.

127 : 9 *seq.* G. Elliot Smith, 1, p. 178, and map 3. Deniker, 2, p. 315, says: "It is generally admitted that the ancient Bronze Age corresponds with the 'Ægean Civilization' which flourished among the peoples inhabiting, between the thirtieth and twentieth centuries B. C., Switzerland, the north of Italy, the basin of the Danube, the Balkan peninsula, a part of Anatolia, and lastly, Cyprus. It gave rise, between 1700 and 1100 B. C., to the 'Mycenæan Civilization,' of which the favorite ornamental design is the spiral."

Myers, in *Ancient History*, pp. 134–135, states that in Crete the metal development began as early, at least, as 3000 B. C., and was at its height in the island about 1600 or 1500 B. C. Articles of Cretan handiwork found in Egypt point to intercourse with that country as early as the sixth dynasty, which he makes about 2500 B. C. See also G. Elliot Smith, 1, pp. 147, 179–180, and the authorities quoted on bronze.

127 : 26–128 : 1 *seq.* G. Elliot Smith, 1, pp. 178–180. Rice Holmes, 1, p. 123, gives in a foot-note the sixth dynasty as about 3200 B. C. (*cf.* above), when Elliot Smith says the movement first began (*ibid.*, pp. 169, 171). They do not agree on the date of this dynasty. See also Rice Holmes (*ibid.*, p. 125), and Breasted, 3, p. 108. Montelius assigns 2100 B. C. for the small copper daggers of northern Italy.

128 : 2. The Eneolithic period. G. Elliot Smith, 1, pp. 20 *seq.*, 37 and 163 *seq.* Professor Orsi is responsible for the introduction of this term. See T. E. Peet, *The Stone and Bronze Ages in Italy*, and G. Sergi, *Italia*, pp. 240 *seq.*, on the Eneolithic period in Italy.

128 : 13. Oscar Montelius, *The Civilization of Sweden in Heathen Times*, and *Kulturgeschichte Schwedens von den älte-*

sten Zeiten; Sophus Müller, *Nordische Alterthumskunde.* The latter gives 1200 B. C. See also Rice Holmes, 1, pp. 64, 127, 424–454; Beddoe, 4, p. 15; Haddon, 3, p. 41. According to Gjerset, in his *History of the Norwegian People,* the Bronze Age in Norway began about 1500 B. C., the Iron Age at 500 B. C. Lord Avebury, pp. 71–72; Read, *Guide to the Antiquities of the Bronze Age;* and Deniker, 2, p. 315, give 1800 B. C. for Britain, and for northern Europe Avebury assigns 2500 B. C. 1800 is the generally accepted date for the beginning of the Bronze Age in Britain.

128 : 16. Alpines in Ireland. Beddoe, 4, p. 15; Fleure and James, pp. 128–129, 135, 139; Rice Holmes, 1, p. 432; Ripley, pp. 302–303; Abercromby, pp. 111 *seq.;* Crawford, pp. 184 *seq.* But Fleure and James say, p. 138, that other Alpines without brow ridges are to be found at the present time in considerable numbers on the east coast of Ireland. Ripley's strong assertion that no Alpines have remained in the British Isles has been proved by more recent study to require modification.

128 : 17. See in this connection Fleure and James, p. 127.

128 : 26. *Cf.* Elliot Smith, 1, pp. 20–21, 163, 181; Peet, 2; Reisner, *Early Dynastic Cemeteries of Naga-ed-Dêr;* and Rice Holmes, 1, p. 65 *seq.*

129 : 2–8. The megaliths were not erected by Alpines, for there are practically none in central Europe, according to Keane, *Ethnology,* pp. 135–136, and Dr. Robert Munro, in a discussion published in the *Jour. Roy. Anth. Inst.,* 1889–1890, p. 65. On the other hand, Peet, 1, pp. 39, 64, says they are being discovered in the interior—a few in Germany. He does not mention bronze among the finds in the megaliths of France, but there was a little gold. Bronze was, however, found in Spain. Consult Fleure and James, pp. 128 *seq.;* Rice Holmes, 2, pp. 8–9; and, for an exhaustive archæological study, Déchellette, *Manuel d'archéologie,* vol. I, chap. III, especially paragraph v, pp. 393 *seq.,* for dolmens in Brittany. Concerning the contents of these we may quote the following:

"Polished hatchets, often enough of rare stone, beads from necklaces, and pendants of Callais or of divers materials, implements of flint, knives, arrow points which are wing-shaped, scrapers, nodules, grinding stones, pottery, vases, grains of baked earth, some rare jewels of gold, collars and bracelets, such is, in general, the composition of the contents of the neolithic dolmens of Brittany, contents different, as we shall see, from those of the sepulchres of the Bronze Age in the same region. These vast Armorican crypts belong certainly to the end of the Neolithic period, in spite of the absence of copper, the habitual forerunner of bronze objects. The smallness of the crypt, the size of the tumulus, the mixture of construction in huge blocks and in walls seem to indicate, as M. Cartailhac has observed, a more recent age than that of ordinary dolmens. In the pure Bronze Age the monolithic supports are replaced by the walls of unmortared stones.

"Moreover, we shall see that there have been found in certain covered alleys in Brittany, pottery of a very characteristic type called calciform vases, pottery belonging in the south of France and southern Europe with the first objects of copper and bronze. Jewels of gold confirm, on the other hand, these chronological determinations." On p. 397: "The dolmen sepulchres of the Bronze Age in Brittany, and notably in Finisterre, are distinguished more often by the type of their construction from those of the Stone Age."

"The dolmens of Normandy and Isle de France contain some stone objects, fragments of vases, and numerous debris of human skeletons." The end of the pure Neolithic is the date of the megaliths in Armorica, as we read on p. 407. The first metals, imported from the south, penetrated into northern Gaul a little later than in the southern provinces. That is why certain typical objects of the end of the pure Neolithic in Armorica, such as Callais and the calciform vases, are associated with the first objects of copper or bronze in the funerary crypts of Provence and Portugal.

G. Elliot Smith and W. H. R. Rivers claim that there is a close connection throughout the eastern hemisphere between the distribution of megalithic monuments and either ocean or fresh-water pearls, but this appears to the author to be far-fetched. Two very recent articles dealing with megaliths are "Anthropology and Our Older Histories," by Fleure and Winstanley, and "The Menhirs of Madagascar," by A. L. Lewis.

129 : 8. Rice Holmes, *Cæsar's Conquest of Gaul*, p. 9.

129 : 12. Earliest iron in the north. See the notes to pp. 131 : 1 and 131 : 9 on the La Tène period. Also Montelius, 2, and Sophus Müller, 2, pp. 145 and 165 *seq.*

129 : 13. Mound burials among the Vikings. Montelius, 2.

129 : 15. Iron in Egypt. Some authorities think that iron in Egypt came in about the same time as bronze, or even earlier. A piece of worked iron was found in the Great Pyramid, to which a date of about 3500 B. C. has been assigned. But, according to the archæological investigations of Professor Flinders Petrie, iron came into general use only about 800 B. C.

Myres, in *The Dawn of History*, is quoted from p. 60 for the following neat summary, although any of the authorities on Egypt, such as Petrie, Maspero, Hall, Breasted, Elliot Smith, Reisner, Meyer, etc., should be consulted as original investigators: "The presence of iron, rare though it is, as far back as the first dynasty, puts Egypt into a position which is unique among metal-using lands; for, apart from these rare, but quite indisputable finds, Egypt remains for thousands of years a bronze-using, and for long, a merely copper-using, country. . . . In Egypt iron was known as a rarity, worn as a charm and an ornament, and even used, when it could be gotten ready made, as an implement; and it does not seem to have been worked in the country, and probably its source was unknown to the Egyptians. In historic times they still called it the 'metal of heaven' as if they obtained it from meteorites; and it looks at present as though their earliest knowledge of it was from the south; for central Africa seems to have had no bronze age but direct and ancient transition from stone to iron weapons. Yet when they conquered Syria in the sixteenth century, they found it in regular use and received it in tribute. At home, however, they had no real introduction to an 'Age of Iron' until they met an Assyrian army in 668 B. C. and began to be exploited by Greeks from over sea." In this connection see also Ridgeway, *The Early Age of Greece*, pp. 613–614. The same author, pp. 154 *seq.*, discusses the value of iron in these early times.

Deniker, p. 315 of his *Races of Man*, says Italy had iron as early as 1200 B. C.

Montelius assigns 1100 for iron in Etruria.

129 : 19. Hallstatt iron culture. See Baron von Sacken, *Das Grabfeld von Hallstatt;* Dr. Moritz Hoernes, *Die Hallstattperiode;* Bertrand and Salomon Reinach, *Les Celts dans les vallées du Pô et du Danube;* and Ridgeway, *The Early Age of Greece*, pp. 407–480 and 594 *seq.* There is a brief summary by Ridgeway which it will serve to quote: "Everywhere else the change from iron weapons to bronze is immediate but at Hallstatt iron is seen gradually superseding bronze, first for ornament, then for edging cutting implements, then replacing fully the old bronze types and finally taking new forms of its own. There can be no doubt that the use of iron first developed in the Hallstatt area and that thence it spread southwards into Italy, Greece, the Ægean, Egypt and Asia, and northwards and westwards in Europe. At Noreia, which gave its name to Noricum, less than forty miles from Hallstatt, were the most famous iron mines of antiquity, which produced the Noric swords so prized and dreaded by the Romans. (See Pliny, *Hist. Nat.*, XXXIV, 145; Horace, *Epod.*, 17 : 71.) This iron needed no tempering and the Celts had found it ready smelted by nature just as the Eskimos had learned of themselves to use telluric iron embedded in basalt. . . . The Hallstatt culture is that of the Homeric Achæans (see Ridgeway, *Early Age of Greece*, pp. 407 *seq.*), but as the brooch (along with iron, cremation of the dead, the round shield and the geometric ornament), passed down into Greece from central Europe, and as brooches are found in the lower town at Mycenæ, 1350 B. C., they must have been invented long before that date in central Europe. But as they are found here in the late bronze and early iron age, the early iron culture of Hallstatt must have originated long before 1350 B. C., a conclusion in accordance with the absence of silver at Hallstatt itself."

Keller, p. 160, describes an iron sword modelled after the same pattern as those of bronze; Schenck, p. 341, mentions a copper axe exactly like those of stone, and another of bronze of very primitive pattern. These and numerous other examples show the gradual growth of each age.

The generally accepted date for Hallstatt is about 900 or 1000 B. C. Even Rice Holmes approves of this. (See 2, p. 9.) But if we believe that iron spread from Hallstatt, and it was in Etruria at 1200–1100 B. C., and in Greece, in the form of swords like those of Hallstatt, at 1400 B. C. (according to Ridgeway), together with pins and various other objects which originated in the Tyrol, it is certainly very conservative to place the appearance of iron in Austria at 1500 B. C. Iron weapons were found in the remains of Troy from the war of 1184 B. C. See Ridgeway, *op. cit.*, and Lartiaux, p. 179.

We may quote from Hoernes as follows regarding the dates: "The temporal limits of the Hallstatt period are uncertain, according to the districts which one includes and the phenomena which one considers. It is now known that the Hallstatt relics for the most part belong to the first half of the last millennium B. C. But while some assign these relics as from the time of perhaps 1200 to perhaps 500, others are satisfied with the period from 900 to 400, or bring them even farther forward. It is certain that one must differentiate in these questions between the west and the east of the Hallstatt culture areas; in the one the particular Hallstatt forms would come nearer to the close than in the other. One or perhaps more centuries lie between the first appearance of the La Tène forms in Western Germany and in the eastern Alps. Also the beginning varies according to the locality and the criteria which one takes for a guide, that is to say, according to whether the phenomena of the time about 1000 B. C. are considered as belonging still in the pure Bronze Age, to a transition period, or indeed to the first Iron Age."

129 : 26. Ridgeway, speaking of the Achæans, says: "They brought with them iron which they used for their long swords and cutting implements. . . . The culture of the Homeric Achæans" (these are dated about 1000 B. C.,

about the time of the Dorians, according to Bury, p. 57) "corresponds to a large extent with that of the early Iron Age of the Upper Danube (Hallstatt) and to the early Iron Age of Upper Italy (Villanova)."

Myres, *Dawn of History*, p. 175, says that there was a gradual introduction of iron, first for tools and then for weapons. It had been known as "precious metal" in the Ægean since the late Minoan third period, or even the late Minoan second period, which is usually dated with the XVIIIth Egyptian dynasty as about 1500–1350. Most other writers, however, including Bury, p. 57, Myers, *Anc. Hist.*, p. 136, and Deniker, *Races of Man*, p. 315, ascribe the general use of iron to a much later invasion, namely that of the Dorians, about 1100 B. C.

129 : 29. Iron swords of the Nordics. Ridgeway, 1, pp. 407 *seq.:* "Their chief weapon was a long iron sword; with trenchant strokes delivered by these long swords the Celts had dealt destruction to their foes on many a field. They used not the thrust, as did the Greeks and Romans of the classical period. This is put beyond doubt by Polybius (II, 30) who in his account of the great defeat suffered by the combined tribes of Transalpine Gæsatæ, Insubres, Boii and Taurisci, when they invaded Italy in 225 B. C., tells us that the Romans had the advantage in arms 'for the Gallic sword can only deliver a cut but cannot thrust.' Again in his account of the great victory gained over the Insubres by the Romans in 223 B. C., the same historian tells us that the defeat of the Celts was due to the fact that their long iron swords easily bent, and could only give one downward cut with any effect, but that after this the edges got so turned and the blades so bent, that unless they had time to straighten them out with the foot against the ground, they could not deliver a second blow.

"'When the Celts had rendered their swords useless by the first blows delivered on the spears the Romans closed with them and rendered them quite helpless by preventing them from raising their hands to strike with their swords, which is their peculiar and only stroke, because their blade has no point. The Romans, on the contrary, having excellent points to their swords, used them not to cut but to thrust; and by thus repeatedly smiting the breasts and faces of the enemy, they eventually killed the greater number of them.' (II, 33 and III.)"

Further evidence in support of our contention that iron was in use much earlier than is generally admitted, comes from an unexpected quarter. J. N. Svoronos, in a recent book on ancient Greek coinage, entitled *L'Hellênism primitif de la Macêdoine, prouvê par la numismatique*, p. 171, remarks: "In the first place, indeed, it is forgotten that some of this information, that which is derived from people of 'mythical' times, can be referred not only to the invention of the first money struck in precious metal (gold, electrum, or silver), but even to obelisks of iron, or to cast plinths in the form of copper axes, which, of a determined weight, and legally guaranteed by the state, constituted, already before the XVth century, as we positively know at the present time, the first legal money."

130 : 2. Keary, *The Vikings in Western Christendom*, chap. XIII; Steenstrup, *Normannerne.*

130 : 4. "Furor Normanorum." On account of the suffering inflicted by the Vikings and other northern raiders in Europe, a special prayer, *A furore Normanorum libera nos* was inserted in some of the litanies of the West.

130 : 5. Rome was sacked by Alaric in 410 A. D., and during the forty years following the German tribes seized the greater part of the Roman provinces and established in them what are known as the Barbarian Kingdoms. Consult Villari, *The Barbarian Invasions of Italy.*

130 : 8 *seq.* See chap. XIII, pp. 242 *seq.*, of this book.

130 : 13 *seq.* Ripley, pp. 125–126. The discovery of the Alpine type was the work of Von Baer.

130 : 24. The Iron Age in western Europe. Deniker, 2, p. 315, says: "So also, according to Montelius, the introduction of iron dates only from the fifth or third century B. C. in Sweden, while Italy was acquainted with this metal as far back as the twelfth century B. C. The civilization of the 'iron age,' distributed over two periods, according to the excavations made in the stations of Hallstatt (Austria)

and La Tène (Switzerland), must have been imported from central Europe into Greece through Illyria. The importation corresponds perhaps with the Dorian invasion of the Peloponnesus. . . . The Hallstattian civilization flourished chiefly in Carinthia, southern Germany, Switzerland, Bohemia, Silesia, Bosnia, the southeast of France and southern Italy (the pre-Etruscan age of Montelius). The period which followed, called the second, or iron age or the La Tène period, was prolonged until the first century B. C. in France, Bohemia and England. In Scandinavian countries the *first iron age* lasted until the sixth century, and the *second iron age* until the tenth century A. D." Referring to the La Tène period in a footnote, Deniker says: "This term, first used in Germany, is accepted by almost all men of science. The La Tène period corresponds pretty nearly with the 'Âge Marmien' of French archæologists and the 'Late Celtic' of English archæologists. *Cf.* M. Hoernes, *Urgeschichte d. Mensch.*, chapters VIII and IX."

Rice Holmes, 1, p. 231, remarks: "Iron in Britain is hardly older than 500 B. C. (*i. e.* the earliest products of the British iron age were traded in. See p. 229). In Gaul the Hallstatt period is believed to have lasted from about 800 to about 400 B. C." On p. 126: "It is certain that in the south-eastern districts iron tools began to be used not later than the fourth century B. C."

See also Sir John Evans, *Ancient Bronze Implements*, pp. 470–472. Consult especially Déchellette, *Manuel d'archéologie*, t. II, pp. 152 *seq.*, on iron in western Gaul during the La Tène period.

130 : 28. La Tène Period. M. Wavre and P. Vouga, *Extrait du Musée neuchatelois*, p. 7; V. Gross, *La Tène, un oppidum helvète;* E. Vouga, *Les Helvètes à La Tène;* and F. Keller, *The Lake Dwellings of Switzerland.*

131 : 3. Montelius suggests this date. Lord Avebury, in *Prehistoric Times*, even goes so far as to suggest 1000 B. C.

131 : 5. Rice Holmes, 2, the footnote to p. 9; Déchellette, *Manuel d'archéologie*, t. II, p. 552.

131 : 9. La Tène culture and the Nordic Cymry. This is also in Britain termed the "Late Celtic period." See Rice

Holmes, 2, p. 318. For the expansion of the Celtic empire and La Tène see Jean Bruhnes, p. 779. G. Dottin, in his *Manuel celtique*, devotes a whole chapter to the Celtic empire.

Cymry. See the note to p. 174 : 22 of this book. As to the Nordic characters of these people, see Rice Holmes, 1, p. 234.

131 : 12. Nordic Gauls and Goidels as users of bronze. Rice Holmes, 1, pp. 126, 229, and elsewhere.

131 : 15. Haddon, *Wanderings of People*, p. 49.

131 : 19. S. Feist, *Europa im Lichte der Vorgeschichte*, p. 9, etc.

131 : 23. Tacitus, *Germania*.

131 : 26. Tacitus, *Germania*, 4: "Personally I associate myself with the opinion of those who hold that in the peoples of Germany there has been given to the world a race untainted by intermarriage with other races, a peculiar people and pure, like no one but themselves; whence it comes that their physique, in spite of their vast numbers, is identical; —fierce blue eyes, red hair, tall frames," etc.

See Beddoe, 4, pp. 81–82; Fleure and James, pp. 122, 126, 151–152; and Ripley, *passim*, for remarks on the increasing brunetness of Britain and other parts of Europe which were formerly more blond.

The recent article by Parsons entitled "Anthropological Observations on German Prisoners of War," contains an interesting reference, on p. 26, to the resurgence of Alpine types in central Europe.

CHAPTER IV. THE ALPINE RACE

134 : 1. There seem to have been at least three distinct types of Alpines, one with a broad head and developed occiput typical of western Europe, a second with a flat occiput and a high crown, represented by such peoples as the Armenoids of Asia Minor, and a third, of which little notice has been taken, except by such men as Zaborowski (2) and Fleure and James, pp. 137 *seq.* This third type is encountered here and there in nests which "stretch at least from southern Italy to Ireland, by way of the Straits of Gibraltar

and across France by the dolmen line." Fleure and James may be quoted for the following discussion. "Questions naturally arise as to the homologies of this type, and its distribution beyond the line here mentioned. If we had the type in Britain, by itself, we should be inclined to connect it with the general population of Central Europe, the dark, broad-headed Alpine type. We should, however, retain a little hesitation about this, as our type is sometimes of extraordinary strength of build and, while often fairly short, it is occasionally outstandingly tall; moreover, the hair is frequently quite black, and this is not on the whole an Alpine character. But, when we note the coastal distribution of this type, our hesitation is much increased, for the Alpine type has spread typically along the mountain flanks and its characteristic rarity in Britain is evidence of how little it has followed the sea.

"We cannot but wonder also whether what Deniker calls the Atlanto-Mediterranean type is not a result of averaging these dark broad-heads with the true Mediterranean type.

"Seeking further distributional evidence, we find that the dark broad-heads are highly characteristic of Dalmatia and may be an old-established stock, but it would appear that this region is famous for the height of the heads there, and our type is not specially high-headed. Broad-head brunets do, however, occur farther east in Asia Minor, the Ægean, and Crete, for example. Many are certainly hypsicephalic, but in others it seems that the brow and head are moderate and the forehead rather rectangular, as in our type. . . .

"It is interesting that there should be evidence of our dark broad-heads beyond the Irish end of the line now discussed, the line of intercourse which Déchellette thinks must be older than the Bronze Age. The chief evidences for the type beyond Ireland are:

"1. Ripley (p. 309) shows that a dark, broad-headed element is present in Shetland, West Caithness, and East Sutherland. This is sometimes called the Old Black Breed.

"2. Arbo finds the coast and external openings of the more southerly Norwegian fjords have a broad-headed population, whereas the inner ends of the fjords and the interior are more dolichocephalic. The broad-heads stretch from Trondhjemsfjord southward, and from their exclusively coastwise distribution he supposes them to have come across from the British Isles.

"The population is darker than the rest of Norway and its area of distribution, as Dr. Stuart Mackintosh has kindly pointed out to us, is, like that of the same type in the British Isles, characterized by a pelagic climate."

Von Luschan has fully discussed the Armenoid type in his *Early Inhabitants of Western Asia*, and with E. Petersen, in *Reisen in Lykien, Milyas, und Kibyratis.* A special study was made by Chantre in his *Recherches anthropologiques dans l'Asie occidentale.*

The first type, then, the western European, has a short, thick stature, round head, and rather light pigmentation; the second, Armenoid, a rather tall stature, square, high head, flat occiput, and dark pigmentation. The third, the Old Black Breed, is rather small and dark.

In addition to these we have a fourth type, which has been called the Bronze Age race, or, better, the Beaker Maker type (Borreby). This has been discussed by Greenwell and Rolleston, Beddoe, and Keith, especially as to their possible survivors at the present day; by Abercromby, in *Bronze Age Pottery;* by Crawford, *The Distribution of Early Bronze Age Settlements in Britain;* and by Peake, in a discussion of the last work in the same number of the *Geographical Journal.* Fleure and James describe it also. See the note to p. 138 : 1 of this book.

Further anthropological studies may simplify the problem somewhat, but the author is now inclined to believe that the above-mentioned third brachycephalic type, the "Old Black Breed," represents the survivors of the earliest waves of the round-head invasion—in Britain antedating the arrival of the Neolithic Mediterraneans, while the first type mentioned above represents the descendants of the last great Alpine expansion. This type in southern Germany has been so thoroughly Nordicized in pigmentation that these blond South Germans are sometimes discussed as though they were a distinct Alpine sub-species. The type is scantily represented in England, and when found may be partly attributed to ecclesiastics and other retainers brought over by the Normans.

The second of the above types, the Armenoids, are virtually absent from Europe, and seem to be characteristic of eastern Anatolia and the immediately adjacent regions.

The author regards the fourth, Borreby or Beaker Maker type of tall, round heads as distinct from the three preceding types. The distribution of their remains would indicate they they entered Britain from the northeast. We have no clew as to their origin. A similar type is found in the so-called Dinaric race of Deniker (which Fleure and James mention in connection with the third type but hesitate to class with it), which extends from the Tyrol along the mountainous east coast of the Adriatic into Albania. Further study of the Tripolje culture (see note to p. 143 : 15) and the mixture of population north of the Carpathians, where the early Nordics and early Alpines came in contact, may throw light on this question, as well as upon the problem of the acquisition of Aryan languages by the Alpines.

All these four round-skulled types seem to have been of West Asiatic origin, but their relationship to each other and to the true Mongols of central Asia is as yet undetermined. One thing is certain, that the Alpine Slavs north and east of the Carpathians, and, to a less degree, the inhabitants of Hungary and Bulgaria, have in their midst a very considerable Mongoloid element, which has entered Europe since the beginning of our era.

134 : 12 *seq.* For further characters of the Alpines see Ripley, pp. 123–128, 416 *seq.*, and p. 139 of this book.

135 : 1. Haddon, *Races of Man*, pp. 15–16; Deniker, *Races of Man*, pp. 325–326.

135 : 14 *seq.* Zaborowski, *Les peuples aryens*, p. 110.

135 : 17. See the authorities given in Ripley; for the Würtemburgers, pp. 233–234; for Bavaria and Austria, p. 228; for Switzerland, pp. 282–286; and for the Tyrolese, p. 102.

135 : 22. Beddoe, 4, chap. VI, is particularly good on the

physical anthropology of the Swiss, while His and Rütimeyer, *Crania Helvetica*, are classic authorities.

135 : 23. *The Historical Geography of Europe*, by Freeman; and Beddoe, 4, pp. 75 *seq.*

135 : 25 *seq.* Beddoe, 4, p. 81, says: "As Switzerland, especially its central region, was for ages the great recruiting ground of mercenary soldiers, it is probable that the tall, blond, long-headed element would emigrate at a more rapid rate than the brown, short-headed one. In this way may also be accounted for the apparent decline in the stature of the modern Swiss, who certainly do not, as a rule, now justify the descriptions given of their huge physical development in earlier days, the days of halberds, morgensterns and two-handed swords." These mercenaries were Teutonic, but their Celtic predecessors were addicted to the same habit as G. Dottin has shown on p. 257 of his *Manuel Celtique:* "When the Celts could not battle on their own account or against their neighbors, they offered their services for the price of silver to foreign kings. There is hardly a country that was not overrun with Celtic mercenaries, nor struggles in which they had not taken part. As far back as 368 B. C. an army sent by Denys, the Ancient, to Corinth to aid the Spartiates, was in part formed of Celtic foot-soldiers."

"Pas d'argent, pas de Suisses," as the old saying has it.

See also Gibbon, *Decline and Fall of the Roman Empire*, chap. LV, where are described the Teutonic Varangians in Constantinople, who became the body-guard of the Greek Emperor.

136 : 5. Osborn, 1, pp. 458 and 479 *seq.* See p. 116 of this book.

136 : 7. G. Elliot Smith, 1, p. 179; Haddon, 3; Peake, 2, pp. 160–163; Deniker, 2, p. 313; Zaborowski, 1, pp. 172 *seq.;* Hervé, 1, IV, p. 393, and V, p. 18; and the authorities quoted in Osborn.

136 : 14. Russian brachycephaly. See Ripley, pp. 358 *seq.*, and the authorities quoted.

136 : 16. See p. 143 : 13 of this book, and notes.

136 : 19–26. Brachycephalic colonies in Scandinavia. See p. 211 : 6 and notes.

136 : 29. Ripley, p. 472.

137 : 2. See the notes to p. 128 : 13.

137 : 8. See pp. 138 : 1, and 163 : 26 of this book.

137 : 21. See the notes to p. 128 : 16.

137 : 29 *seq.* Beddoe, 4, pp. 231–232.

138 : 1 *seq.* Beddoe, 4, pp. 15, 17, 231–233; Davis and Thurnam; Keane, 1, p. 150; Rice Holmes, 1, pp. 194, 441; Ripley, pp. 308–309. Holmes suggests that the Beaker Makers may have come from Denmark. Compare this theory with that expressed by Fleure and James, pp. 128 *seq.* and 135; and by Abercromby, Crawford and Peake as given there. The Beaker Makers are quite fully discussed on pp. 86–88, 117, 128 *seq.*, and 135–137, in the article by Fleure and James. See also Greenwell, *British Barrows*, pp. 627–718, and J. P. Harrison, *On the Survival of Certain Racial Features in the Population of the British Isles.* Fleure and James describe the type as follows on p. 136: "With the beakers have long been associated the broad-headed, strong-browed type, long known to archæologists as the Bronze Age race, but better called the 'Beaker Makers,' or Borreby type, for we now think that these people reached Britain without a knowledge of bronze. . . . The general description of them is that they must have been taller than the Neolithic British, averaging 5 feet 7 inches, rather strongly built, with long forearms and inclined to roughness of feature. The head was broad (skull index over 80, often 82 or more) and the supraciliary arches strong, but very distinctly separated in most cases by a median depression, and thus strongly contrasted with the continuous supraciliary ridges of *e. g.*, Neanderthal man. . . . Keith . . . thinks it [the type] was usually brown to fair in colouring at all periods, and this seems to be a very general opinion."

138 : 3. Beddoe, 4, p. 16: "On the whole, however, we cannot be far wrong in describing the British skulls of the bronze period as distinctly brachycephalic; and this seems to have been the case in Scotland as well as in England (see D. Wilson, *Archæological and Prehistoric Annals*, pp. 168–171). Whencesoever they came, the men of the British bronze race were richly endowed, physically. They were, as

a rule, tall and stalwart, their brains were large and their features, if somewhat harsh and coarse, must have been manly and even commanding. The chieftain of Gristhorpe, whose remains are in the Museum of York, must have looked a true king of men with his athletic frame, his broad forehead, beetling brows, strong jaws and aquiline profile."

138 : 14. Rice Holmes, 1, p. 425.

138 : 17. Dinaric Race. Deniker, 1, pp. 113–133; also 2, p. 333. For allusions to this and descriptions see Ripley, pp. 350, 412, 597, 601–602.

138 : 18. Remains of Alpines. Fleure and James, pp. 117, no. 3, and pp. 137–142.

138 : 22. See the notes to p. 122 : 3. Also Jean Bruhnes in *Le Correspondant* for September, 1917, p. 774.

139 : 3. See p. 121 : 16.

139 : 6 *seq.* Sergi, *Africa*, p. 65; Studer and Bannwarth, *Crania Helvetica Antiqua*, pp. 13 *seq.;* His and Rütimeyer, *Crania Helvetica*, p. 41.

139 : 16. See p. 144 of this book.

139 : 22 *seq.* See p. 130.

140 : 1 *seq.* See DeLapouge, *passim;* Ripley, p. 352; Johannes Ranke, *Der Mensch*, vol. II, pp. 296 *seq.;* part II of Topinard's *L'anthropologie générale*, and the note to p. 131 : 26.

140 : 4 *seq.* Alpines in the Cantabrian Alps. See Ripley, p. 272, and Oloriz, *Distribucion geográfica del Indice cephalica.*

140 : 9. Basques and the Basque language. See the notes to p. 234 : 24 *seq.*

140 : 15. Aquitanian. See p. 248 : 14. Ligurian. See the notes to p. 235 : 17.

140 : 17. Round skulls on North African coast. See pp. 127–128.

140 : 22 *seq.* See the authorities quoted in Ripley, chap. VII. For the Walloons see Rice Holmes, 2, pp. 323–325, 334; Deniker, 2, p. 335; D'Arbois de Jubainville, 2, pp. 87–95; G. Kurth, *La frontière linguistique en Belgique;* L. Funel, *Les parlers populaires du département des Alpes-Maritimes*, pp. 298–303.

The dialects or patois spoken to-day in France all fall under one of these two languages. They can be classified as follows:

LANGUE D'OC

Patois	Spoken in the Departments of
Languedocian	Gard, Hérault, Pyrénées-Orientales, Aude, Ariège, Haute-Garonne, Lot-et-Garonne, Tarn, Aveyron, Lot, Tarn-et-Garonne.
Provençal	Drôme, Vaucluse, Bouches-du-Rhône, Hautes- and Basses-Alpes, Var.
Dauphinois	Isère.
Lyonnais	Rhône, Ain, Saône-et-Loire.
Auvergnat	Allier, Loire, Haute-Loire, Ardèche, Lozère, Puy-de-Dôme, Cantal.
Limousin	Corrèze, Haute-Vienne, Creuse, Indre, Cher, Vienne, Dordogne, Charente, Charente-Inférieure, Indre-et-Loire.
Gascon	Gironde, Landes, Hautes-Pyrénées, Basses-Pyrénées, Gers.

LANGUE D'OÏL

Norman	Normandie, Bretagne, Perche, Maine, Anjou, Poitou, Saintonge.
Picard (modern French)	Picardie, Île-de-France, Artois, Flandre, Hainault, Basse Maine, Thiérache, Rethelois.
Burgundian	Nivernais, Berry, Orléanais, lower Bourbonnais, part of Ile-de-France, Champagne, Lorraine, Franche-Comté.

140 : 28 *seq.* For the distribution of the Alpines see Ripley, p. 157.

141 : 6. Austria and the Slavs. See Ripley's authorities mentioned on pp. 352 *seq.*

141 : 9. See p. 143 of this book.

141 : 13. See the notes to chap. IX.

141 : 23–142 : 4. Introduction of the Slavs into eastern Germany. See Jordanes, *History of the Goths*, V, 34, 35, and XXIII, 119; Freeman, *Historical Geography of Europe*, pp. 113 *seq.*

141 : 25. Wends, *Antes and Sclaveni.* See the notes to p. 143 : 13 *seq.*

142 : 4. Haddon, 3, p. 43.

142 : 9. Ripley, p. 355 and the authorities quoted. The word Slave originally signified *illustrious* or *renowned* in Slavic language, but in Europe was a word of disdain for the backward Slavs. See T. Peisker, *The Expansion of the Slavs*, Hist., vol. II, p. 421, n. 2.

142 : 13. See pp. 143–144 of this book.

142 : 23. Russian populations. Ripley, based on Anutschin, Taranetzki, Niederle, Zakrewski, Talko-Hyrncewicz, Olechnowicz, Matiezka, Kharuzin, Retzius, Bonsdorff, etc. Consult his chap. XIII, especially pp. 343–346 and 352. Olechnowicz and Talko-Hyrncewicz both remark on the dolichocephaly and blondness of the upper classes of Poland.

143 : 1. Keane, 2, pp. 345–346; Beddoe, 1, p. 35; Freeman, 1, pp. 107, 113–116, 155–158.

143 : 3. Avars. See the authorities just given; also Eginhard, *The Life of Charlemagne;* Gibbon, *Decline and Fall of the Roman Empire*, chaps. XLII, XLV and XLVI.

143 : 4. Hungarians. That the Hungarians as such were known earlier than this date appears from a passage in Jordanes, written about 550 A. D. See the *History of the Goths*, V, 37, where he says: "Farther away and above the sea of Pontus are the abodes of the Bulgares, well known from the disaster our neglect has brought upon us. From this region, the Huns, like a fruitful root of bravest races, sprouted into two hordes of people. Some of these are called Altziagiri, others, Sabiri; and they have different dwelling places. The Altziagiri are near Cherson, where the avaricious traders bring in the goods of Asia. In summer they range the plains, their broad domains, wherever the pasturage for their cattle invites them, and betake themselves in winter beyond the sea of Pontus. Now the Hunuguri are known to us from the fact that they trade in marten skins. But they have been cowed by their bolder neighbors." Also on the Hunuguri see Zeuss, p. 712.

143 : 5 *seq.* The invasion of the Avars and the Magyars. See Freeman, 1, pp. 107, 113, 115–116; Beddoe, 1, p. 35; and Ripley, p. 432.

143 : 13 *seq.* Haddon, 3, chap. III, *Europe*, especially p.

40; and A. Lefèvre, *Germains et Slavs*, p. 156. Minns, in an article on the Slavs, says: "Pliny (N. H., IV, 97) is the first to give the Slavs a name which can leave us in no doubt. He speaks of the Venedi (*cf.* Tacitus, *Germania*, 46, Veneti); Ptolemy (*Geog.*, III, 5, 7, 8) calls them Venedæ and puts them along the Vistula and by the Venedic Gulf, by which he seems to mean the Gulf of Danzig; he also speaks of the Venedic mountains to the south of the sources of the Vistula, that is, probably the northern Carpathians. The name Venedæ is clearly Wend, the name that the Germans have always applied to the Slavs. Its meaning is unknown. It has been the cause of much confusion because of the Armorican Veneti, the Paphlagonian Enetæ, and above all the Enetæ-Venetæ at the head of the Adriatic. . . . Other names in Ptolemy which almost certainly denote Slavic tribes are the Veltæ on the Baltic. The name Slav first occurs in Pseudo-Cæsarius (Dialogues, II, 110; Migne, P. G., XXXVIII, 985, early 6th century), but the earliest definite account of them under that name is given by Jordanes (Getica [*History of the Goths*], V, 34, 35), about 550 A. D.: 'Within these rivers lies Dacia, encircled by the Alps as by a crown. Near their left ridge, which inclines toward the north, and beginning at the source of the Vistula, the populous race of the Venethi dwell, occupying a great expanse of land. Though their names are now dispersed amid various clans and places, yet they are chiefly called Sclaveni and Antes. The abode of the Sclaveni extends from the city of Noviodunum and the lake called Mursianus, to the Dnâster, and northward as far as the Vistula. They have swamps and forests for their cities. The Antes, who are the bravest of these peoples dwelling in the curve of the sea of Pontus, spread from the Dnâster to the Dnâper, rivers that are many days' journey apart.'" See also Zaborowski, 1, pp. 272 *seq.*

The name *Wends*, as has been said, was used by the Germans to designate the Slavs. It is now used for the Germanized Polaks, and especially for the Lusatian Wends or Sorbs. It is first found in English used by Alfred. Canon I. Taylor, in *Words and Places*, p. 42, says: "The Sclavonians call themselves either *Slowjane*, 'the intelligible men,' or else *Srb* which means 'kinsmen,' while the Germans call them *Wends*."

Haddon, 3, p. 47, says: "The Slavs, who belong to the Alpine race, seem to have had their area of characterization in Poland and the country between the Carpathians and the Dnieper; they may be identified with the Venedi."

In the author's opinion these people have, so far as is known, nothing whatever to do with the tribe of Veneti at the head of the Adriatic, nor with the Veneti in western Europe in what is now Brittany. Of the former Ripley, p. 258, says that they have been generally accepted as of Illyrian derivation and cites D'Arbois de Jubainville, Von Duhn, Pigorini, Sergi, Pullé, Moschen and Tedeschi as authorities.

The Veneti in Italy are tall, broad-headed and some are blond, having mixed with the Teutons. They possessed some eastern habits, such as their marriage customs, as set forth in Herodotus. They were flourishing, wealthy and peaceful. Later they were driven to what is now Venice.

The Veneti in Gaul were a powerful maritime people, who carried on a sea trade with Britain. Strangely, perhaps, the ancient name of northern Wales was Venedotia. The name Veneto, however, has nothing to do with that of Vandal. For some theories as to the relationships of some of these Veneti, see Zaborowski, 3.

143 : 15. Gallicia and the Tripolje Culture. *Cf.* pp. 113–114. Gallicia is not far from the known location of the Brünn-Prêdmost race, which was *dolichocephalic with a long face.* This early appearance of a dolichocephalic race at the point where the dolichocephalic Nordics later came in contact with the Alpines is very significant.

The locality is in the neighborhood of the Tripolje area in southern Russia, for which see Minns, *Scythians and Greeks*, pp. 130–142, and Peake, 2, p. 164.

Minns says: "The first finds of Neolithic settlements in Russia were made near the village of Tripolje, on the Dnêpr, forty miles below Kiev, and this name has since been extended to the culture of a large area in southern Russia. The remains consist of so-called 'areas' with buildings which had wattled, clay-covered walls which were fired when dry to give them greater hardness. Pottery is present in great abundance and variety of forms. These bear painted decorations which are very artistic. There are a few figurines. The buildings were not dwellings but probably chapels. The homes were probably pit dwellings. Bodies of the dead were incinerated and deposited in urns.

"The theory has been abandoned that this was an autochthonous development, typical of the Indo-Europeans [Nordics] before they differentiated (*cf.* Chvojka, the first discoverer). Although similar to Ægean art this was earlier (see Von Stern, *Prehistoric Greek Culture in the South of Russia*). It came suddenly to an end and had no successor in that region. The people were agriculturalists long before the Scythians, but the next people who lived there were thorough nomads. Niederle (*Slav. Ant.*, I) dates them 2000 B. C. The Tripolje people either moved south or were overwhelmed by new comers." As Peake says, 2, pp. 164–165, here was a very likely point of contact between the Nordic and Alpine stocks, a mixture which, in the opinion of the author, may ultimately throw some light on the origin of the Dinaric and Beaker Maker types. Through this region both Alpines and Nordics must have passed many times in their wanderings. Here perhaps the Alpines became partly Nordicized, especially as to their language.

143 : 21. Sarmatians. There has been considerable confusion over these people, owing to the various ways in which the name has been spelled by early and later writers, and to the fact that they dwelt in the region where both Alpines and Nordics must have existed side by side. The name Sarmatians has been applied at one time to Nordics, at another to Alpines or even Mongolians, depending on the dates when they were discussed and the bias of various writers. We have no generic name for the Alpine peoples who must have been in this region in early times, except that of Sarmatians or Scythians. As the Scythians are apparently strongly Nordic in character, the name Sarmatians seemed more fitting to apply to the Alpine tribes who were certainly there.

Not all authorities are agreed as to their affiliations, however, as has been said.

Jordanes declares that the Sarmatians and the Sauromatæ were the same people. Stephanus Byzantius states that the Syrmatæ were identical with the Sauromatæ. They are first mentioned by Polybius as being in Europe in 179 B. C. (XXV, II; XXVI, VI, 12). But in Asia we hear of them as early as 325 B. C., according to Minns, p. 38, who says that they gradually shifted westward, until in 50 A. D. they were in the Danube valley. Jordanes later speaks of the Carpathian mountains as the Sarmatian range. Mierow, in the notes to his translation of Jordanes, makes the Sarmatians a great Slavic people dwelling from the Vistula to the Don, in what is now Poland and Russia. (See also Hodgkin, *Italy*, vol. I, part I, p. 71.) According to Jordanes, the Sarmatians were beyond Dacia (the ancient Gothic land) and to the north (XII, 74). It is with these statements in mind that the author has designated them as Alpines.

Minns describes the Sarmatians as nomads of the Caspian steppes who wore armor like the Hiung-nu. About 325 B. C. there was a decline of the Scyths and they appear. During the second and third centuries A. D. was the time when they spread over the vast regions from Hungary to the Caspian. Minns, however, is firm in the belief that they were Iranians [Nordics], like the Alans, Ossetes, Jasy, etc. In the second half of the fourth century B. C. they were still east of the Don or just crossing; for the next century and a half we have very scanty knowledge of what was happening in the steppes. Procopius, III, II, also makes them Goths. (See the note to p. 66 : 16.) Feist, 5, p. 391, quotes Tacitus as to their being horse-loving nomads of south Russia. See also D'Arbois de Jubainville, 4, t. I, and Gibbon, chaps. XVIII, XXV, etc., for further discussions.

144 : 11 *seq.* See the authorities quoted in Ripley, pp. 361–362. The Bashkirs, however, are partly Finn, partly Tatar as well.

144 : 26–145 : 1. Ripley, pp. 416 *seq.* and 434.

145 : 3. Ripley, p. 434.

145 : 7. Freeman, 1, pp. 113–115; Haddon, 3, p. 45.

145 : 10. Ripley, p. 421. These are the Volga Finns. Old Bulgaria, according to Pruner-Bey, 2, t. I, pp. 399–433, P. F. Kanitz and others, seems to have been between the Ural mountains and the Volga. The old Bulgarians were a Finnic tribe (just which is a matter of much dispute). They crossed the Danube toward the end of the seventh century. See Freeman, 1, pp. 17, 155.

145 : 11 *seq.* Ripley, p. 426, based on Bassanovič, p. 30.

145 : 16. Ripley, p. 421.

145 : 19. Of the numerous tribes who, since the Christian Era, have entered Europe and Anatolia from western Asia some were undoubtedly pure Mongoloids, like the Huns of Attila, or the hordes of Genghis Khan. Others were probably under Mongoloid leaders, and included a large proportion of West Asiatic Alpines (*i. e.*, Turcomans), while still others may have been substantially Alpines. The Mongols in their sweep into Europe would naturally gather up and carry with them many of the tribes of western Asia, or perhaps more often would drive the latter ahead of them.

146 : 3 *seq.* Ripley, p. 139; Taylor, 1, p. 119; Peake, 2, p. 162.

146 : 8. Ripley, p. 136. These primitive nests occur also in Norway.

146 : 12. See the note to p. 131 : 26.

146 : 19–147 : 6. See pp. 122 and 138 of this book.

147 : 7 *seq.* Accad and Sumer. Prince, and Zaborowski (after de Sarzec) give the earliest date of Accad as about 3800 B. C., but Prince thinks this date too old by 700–1000 years. See also Zaborowski, 1, pp. 118–125. H. R. Hall, in *The Ancient History of the Near East*, reviews the entire work in this field in his first chapter. According to him, dates in Babylonia can be traced as far back as those of Egypt, without coming to a time when there was no writing or metal, while Egyptian records begin in a Neolithic culture. The earliest dates so far established are in the fourth millennium B. C., but already a high degree of civilization had been reached there or elsewhere by people who brought it to Babylonia. Hall, p. 176, says: "The most ancient remains that we find in the city mounds are Sumerian. The site of

the ancient Shurripak, at Fârah in Southern Babylonia, has lately been excavated. The culture revealed by this excavation is Sumerian, and metal-using, even at the lowest levels. The Sumerians apparently knew the use of copper at the beginning of their occupation of Babylonia, and no doubt brought this knowledge with them." See chap. V of Hall's book, and the two great works of King, the *Chronicles Concerning the Early Babylonian Kings*, and *The History of Sumer and Akkad*, as well as Rogers's *History of Babylonia and Assyria.* In his preface to the first-mentioned of his two works King states that the new researches are resulting in a tendency to reduce the dates of these ancient empires very considerably, especially for the dynasties. Thus for Su-abu, the founder of the first dynasty, a date not earlier than 2100 B. C. is now given, and for Hammurabi one not earlier than the twentieth century B. C. Accad is by many authors, including Breasted, considered to have been Semitic from the beginning, and to have been established about 2800 B. C. But Zaborowski claims that it was not originally Semitic, but Semitized at a very early date. He makes both city-kingdoms originally Turanian [by which he means Alpine and pre-Aryan] with an agglutinative language related to the Altaic. See also Zaborowski, 2. He dates the cuneiform inscriptions between 3700 and 4000 B. C., after de Sarzec and de Morgan. Hall draws attention to the remarkable resemblance of the Sumerians to the Dravidians, and is inclined to believe that they may have come from India. Both G. Elliot Smith and Breasted claim the Babylonians derived their culture from Egypt, but the weight of evidence is gradually accumulating against them. See Hall, chap. V. The relations of the two regions and Egyptian dates are treated in Reisner's *Early Dynastic Cemeteries of Naga-ed-Dêr;* and Eduard Meyer, *Geschichte des Altertums*, should also be consulted. Against these Egyptologists are most of the later writers, such as Hall and King and many others. The location of Babylonia is a fact distinctly in favor of its earlier beginnings. There is no denying the very remote origin of Egyptian culture, which in its isolation for so many centuries had ample time to develop its own peculiar features and to become sufficiently strong to later extend a very wide influence. There is an interesting study of the fauna of Egypt by Lortet and Gaillard, which proves that much of it was originally African, not Asiatic, as those who wish to prove the opposite theory, that Egyptian culture was derived from the east in very remote times, have endeavored to establish. There is no doubt that the Egyptians were sufficiently plastic and adaptable in the earlier centuries of their development, wherever they may have come from, to make use of what the continent of Africa contributed in the way of resources. (See also Gaillard, *Les Tatonnements des Egyptiens*, etc., and H. H. Johnston, *On North African Animals*.) To claim that the civilization of Sumer was derived directly from Elam, which in turn obtained its earliest culture from Egypt, is, in the opinion of the author, to reverse the truth. Some authorities believe that Elam was the origin from which came the civilization found by Pumpelly in Turkestan, and believed by him to have been not earlier than the end of the third millennium B. C. (For a further reference to this see the note to p. 119 : 15 of this book, on Balkh.)

See Hall as to the relationship of the Accadians and Sumerians with Elam. Zaborowski says they were all of the same Alpine stock, that is, the very early Sumerians and Accadians and Elamites. See 2, p. 411. For Susa, Elam and Media, see *Les peuples Aryens*, pp. 125–138, and Hall, chap. V. For the Persians, Zaborowski, 1, pp. 134 *seq.* Ripley, pp. 417, 449–450, discusses some of the eastern tribes, among them the Tadjiks, whom general opinion makes round-skulled. These, according to Zaborowski, are the living prototypes of the Susians, Elamites and Medes. Many writers consider the Medes to have been Nordics and related to the Persians. The author, however, follows Zaborowski in classing them as the early brachycephalic population of Elam or its highlands or plateau, which was conquered by the Persians. On the Medes and Media see the notes to p. 254 : 13.

CHAPTER V. THE MEDITERRANEAN RACE

148 : 1. The Mediterranean Race. Sergi, 4; Ripley; and Elliot Smith, 1.

148 : 14. Deniker, 2, pp. 408 *seq.;* Ripley, pp. 450–451.

148 : 15. See the notes to pp. 257–261.

148 : 18. Dravidians. Bishop R. Caldwell, *Comparative Grammar of the Dravidian or South Indian Family of Languages;* G. A. Grierson, *Linguistic Survey of India*, vol. IV, *Munda and Dravidian Languages;* Friedrich Müller, *Reise der österreichischen Fregatte Novara um die Erde in den Jahren* 1857–1859, etc., pp. 73 *seq.; Grundriss der Sprachwissenschaft*, vol. III, pp. 106 *seq.* See also Haddon, 3, p. 18.

148 : 22 *seq.* Deniker, 2, p. 397; Haddon, 1, 3, but Haddon has pointed out that the Andamanese are not racially of the same stock as the Sakai, Veddahs, etc.

149 : 6. Haddon, 3, and Sergi, 4, p. 158; Ripley; Fleure and James; Peake; etc.

149 : 12. Peake, 2, p. 158.

149 : 21. On this point, Ripley, pp. 465 *seq.*, quotes Von Dueben, Retzius, Arbo, Montelius, Barth, Zograf, Lebon, Olechnowicz, etc.

150 : 8. See the notes to p. 149.

150 : 12. See the notes to p. 257.

150 : 21. Beddoe, 4, and 3, pp. 384 *seq.*, and Ripley, pp. 326, 328 *seq.*

150 : 24 *seq.* See the notes to p. 149.

150 : 29–151 : 3. A. Retzius, 1, 2; G. Retzius, 1, 2; Peake, 2, p. 158. Taylor, *Origin of the Aryans*, p. 101, says the Iberian type is not found in northern Europe east of Namur. In the British Isles, however, it extends to Caithness.

151 : 3 *seq.* See the notes to p. 149; Ripley, pp. 461–465; Sergi, 4, p. 252; Osborn, 1, p. 458.

151 : 18. Sir Harry Johnston, *passim;* G. Elliot Smith, 1, pp. 18, 30, 31, and chap. V.

151 : 22 *seq.* G. Elliot Smith, 1, p. 30. For a contrary opinion see Sergi, 4.

152 : 3. W. L. and P. L. Sclater, *The Geography of Mam-*

mals, pp. 177 *seq.;* Flower and Lydekker, *Mammals, Living and Extinct*, pp. 96–97.

152 : 6. Elliot Smith, 1, chap. IV and elsewhere; Sergi, 4, chap. III.

152 : 12. Negroes seem to have been unknown in Egypt and Nubia in pre-dynastic days and only appear in small numbers in the third and fourth dynasties, in the South. The great ruins on the Zambezi at Zimbabwe were probably the work of the Mediterranean race and are to be dated about 1000 B. C. In other words, all northeast Africa, including Nubia, the northern Sudan, the ancient Kingdom of Meroë at the junction of the Blue and White Niles, Abyssinia and the adjoining coast were originally part of the domain of the Mediterranean race.

In the recent kingdom of the Mahdi, the predominant element was not Negro but Arab more or less mixed.

152 : 16. Sir Harry Johnston, *passim;* Ripley, pp. 387, 390; Hall, *Ancient History of the Near East.*

152 : 27. Sardinia. See Ripley and Von Luschan. A recent article by V. Giuffrida-Ruggeri, entitled "A Sketch of the Anthropology of Italy," in the *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, is well worth consideration. On pp. 91–92 the author gives a short sketch of the Sardinians and his authorities are to be found in a footnote on p. 91.

153 : 4. Albanians. See the notes to p. 163 : 19.

153 : 6 *seq.* Fleure and James, pp. 122 *seq.*, 149; Beddoe, 4, pp. 25–26; Davis and Thurnam, especially p. 212; Boyd Dawkins, *Early Man in Britain.*

153 : 10. Scotland. See the notes to pp. 150 : 10 and 204 : 5.

153 : 14 *seq.* See the notes to p. 229 : 5–12.

153 : 24 *seq.* The Mediterranean Race in Rome. Montelius, *La Civilisation primitive en Italie;* Peet, *The Stone and Bronze Ages in Italy;* Munro, *Palæolithic Man and the Terramara Settlements;* Modestov, *Introduction à l'histoire romain;* Frank, *Roman Imperialism.* Giuffrida-Ruggeri, in *A Sketch of the Anthropology of Italy*, p. 101, says of the composition of the population of Rome: "The three fundamental European

races, *H. mediterraneus*, *H. alpinus*, and *H. nordicus*, had their representatives among the ancient Romans, although the skeletal remains of the Mediterraneans and the Northerners are difficult to distinguish from each other. It is also possible that the Northerners belonged to the aristocrats who preferred to burn their dead. In the calm tenacity and quiet growth of the Roman people perhaps the descendants of *H. nordicus* represented the turbulent restlessness of violent and bold individuals which, even in Roman history, one is able to discern from time to time."

In this connection it is interesting to note what Charles W. Gould has said on p. 117, in *America, a Family Matter*, concerning Sulla. He describes him as follows: "Even during the terror Sulla found time for enjoyment. Tawny hair, piercing blue eyes, fair complexion readily suffused with color as emotion and red blood surged within, Norseman that he was, he presided over constant and splendid entertainments, taking more pleasure in a witty actor than in the degenerate men and women of the old nobility who elbowed their way in." Also see the notes to p. 215 : 21.

154 : 5. Quarrels between the Patricians and the Plebs. See Tenney Frank, *Roman Imperialism*, pp. 5 *seq.*, for a discussion of the mixture of races, "only we cannot agree that a social state can accomplish race amalgamation. The two races are still there." Boni, *Notizie degli Scavi*, vol. III, p. 401, believes that the Patricians were the descendants of the immigrant Aryans, while the Plebeians were the offspring of the aboriginal Non-Aryan stock. Compare this with the statements of early writers concerning the conditions in Gaul, especially as summed up by Dottin in his *Manuel Celtique*.

Frank says, concerning the quarrels, in chap. II, *op. cit.*: "Roman tradition preserved in the first book of Livy presents a very circumstantial account of the several battles by which Rome supposedly razed the Latin cities one after another. . . . Needless to say, if the Latin tribe had lived in such civil discord as the legend assumes, it would quickly have succumbed to the inroads of the mountain tribes." Thus probably the quarrels between Latin and Etruscan have been overrated. See again, p. 14, for the oriental origin of some intruding people. He says, in a note at the end of the chapter: "Ridgeway, in *Who were the Romans*, 1908, has ably, though not convincingly developed the view that the Patricians were Sabine conquerors. Cuno, *Vorgeschichte Roms*, I, 14, held that they were Etruscans. Fustel de Coulanges, in his well-known work, *La cité antique*, proposed the view that a religious caste system alone could explain the division. Eduard Meyer, the article on the Plebs in *Handwörterbuch der Staatswissenschaften*, and Botsford, *Roman Assemblies*, p. 16, have presented various arguments in favor of the economic theory. See Binder, *Die Plebs*, 1909, for a summary of many other discussions."

Breasted, *Ancient Times*, pp. 495 *seq.*, and Sir Harry Johnston, *Views and Reviews*, p. 97, are two who have touched upon these questions.

On Etruria see the note to p. 157 : 14.

154 : 11. An allusion to the short stature of the Roman legions of Cæsar in Gaul may be found in Rice Holmes, 2, p. 81. D'Arbois de Jubainville, *Les Celts en Espagne*, XIV, p. 369, says in describing a combat between P. Cornelius Scipio and a Gallic warrior: "Scipio was of very small stature, the Celtiberian warrior with the high stature which in all times in the tales of the Roman historians characterizes the Celtic race; and the beginning of the struggle gave him the advantage." Taylor, *Origin of the Aryans*, p. 76, says: "The stature of the Celts struck the Romans with astonishment. Cæsar speaks of their *mirifica corpora* and contrasts the short stature of the Romans with the *magnitudo corporum* of the Gauls. Strabo, also, speaking of the Coritavi, a British tribe in Lincolnshire, after mentioning their yellow hair, says: 'To show how tall they are, I saw myself some of their young men at Rome and they were taller by six inches than anyone else in the city.'" See also Elton, *Origins*, p. 240.

154 : 18 *seq.* Nordic Aristocracy in Rome. Tenney Frank, *Race Mixture in the Roman Empire.* But he also makes Gauls and Germans on the same level as other conquered people, as legionaries, etc. See also Giuffrida-Ruggeri, p. 101.

155 : 5 *seq.* G. Elliot Smith, 1; Peet, 2, pp. 164 *seq.*

Fleure and James use the terms Neolithic and Mediterranean interchangeably. Recent study is giving a somewhat different interpretation to the significance of the megaliths. See the article by H. J. Fleure and L. Winstanley in the 1918 *Journal of the Royal Anthropological Institute of Great Britain and Ireland.* On the megaliths see also the note to p. 129 : 2 *seq.*

155 : 22 *seq.* See the notes to p. 233 *seq.*

155 : 27–156 : 4. See the notes to p. 192.

156 : 4. See the notes to p. 244 : 6.

156 : 8. Sergi, 4, p. 70.

156 : 10. Gauls. D'Arbois de Jubainville, 1, XIV, p. 364, says: "Hannibal left Spain for Italy in 218, but he left there a Carthaginian army in the ranks of which marched auxiliaries furnished by the Celtic peoples of Spain; Roman troops came to combat this army and four years after the departure of Hannibal, (*i. e.* in 214), they gave many battles to the Carthaginian generals where the Celts were vanquished. In the booty there were found abundant Gallic trappings, especially a great number of collars and bracelets of gold; among the dead of the Carthaginian army left upon the plain were two petty Gallic kings, Moencapitus and Vismarus. Livy, who tells us these things, says distinctly that the trappings were Gallic (Gallica) and that the kings were Gallic. See Livy, I, XXIV, c. 42."

156 : 13. See the note to p. 192.

156 : 16. Feist, 5, p. 365, is one of the authors who notes the fact that classic writers spoke of light and dark types in Spain.

156 : 18. This of course means racial evidence. See Mommsen, *History of the Roman Provinces*, I, chap. II, and Burke, *History of Spain*, p. 2.

156 : 25–157 : 3. On the history of the Albigenses the most important authority is C. Schmidt, *Histoire de la secte des Cathares ou Albigeois*, Paris, 1849. The Albigenses were deeply indebted to the Arabic culture of Saracenic Spain, which was the medium through which much of the ancient Greek science and learning was preserved to modern times.

157 : 4. Ripley, pp. 260 *seq.* For an exhaustive résumé

of the subject see Rice Holmes, 2, pp. 277–287. Also consult the notes to p. 235 : 17 of this book.

157 : 6. See p. 122 for the predominance of the Mediterraneans.

157 : 10. Umbrians and Oscans. It is fair to assume that some people brought the Aryan languages into Italy from the north, and this introduction is credited to the Umbrians and Oscans. (See Helbig, *Die Italiker in der Poebene*, pp. 29–41; Ridgeway, *Early Age of Greece;* Conway, *Early Italic Dialects.*) The Umbrians and Oscans were closely allied in regard to their language, whatever may have been their ethnic affinities. In a remoter degree they were connected with the Latins. From the time and starting-point of their migrations, as well as from their type of culture, it would appear that they were cognate with the early Nordic invaders of Greece. Whether they were wholly Nordic, or were thoroughly Nordicized Alpines, or merely Alpines with Nordic leaders is not of particular moment in this connection, but if they were the carriers of Aryan language and culture they were Nordicized in a degree comparable to the genuine Nordics who invaded Greece. Giuffrida-Ruggeri, in one of the latest papers on Italy, as well as many earlier authorities, regards the Umbrians as Alpines, but he says they were not all round-skulled. "The Osci, the Sabines, the Samnites, and other Sabellic peoples were Aryans or Aryanized, although they inhumated their dead instead of burning them. It is possible that the founders of Rome consisted of both families, as we find both rites in ancient Rome" (p. 100).

157 : 14. Etruscans. The author is familiar with the persistent theory that the Etruscans came from Asia Minor by sea, but he nevertheless regards them as indigenous inhabitants of Italy, that is, the Pre-Aryan, Pre-Nordic Mediterraneans, who, as part of a large and extended group, were spread over a great part of the shores of the Mediterranean, and were at that time the Italian exponents of the prevailing Ægean culture. During the second millennium in which this culture flourished, they were much influenced by Crete, although they developed their civilization along special lines. The Etruscan language, excluding the borrowed elements

from later Italic dialects, is apparently in no sense Aryan. *Cf.* Hall, *Ancient History of the Near East*, pp. 53–54.

157 : 16. The date 800 is given by Feist, 5, p. 370.

157 : 18. Livy, V, 33 *seq.*, is the authority for the date of the sixth century. See also Polybius, 1, II, c. XVII, § 1. Myers, *Ancient History*, makes the settlement of the Gauls in Italy about the fifth century B. C. Most authorities follow Livy.

157 : 21. To show how approximate the authorities are on this date, Rice Holmes, 2, p. 1, and Myers, *Ancient History*, make it 390, while Breasted gives 382.

157 : 23. Livy, V, 35–49, treats of the taking of Rome by the Gauls. The name Brennus means raven; it is from the Celtic *bran*, raven, crow.

157 : 26. There is a considerable Frankish element there also, among the aristocracy.

158 : 1 *seq.* An interesting discussion of this event is given by Salomon Reinach, 2. The invasion was resisted first at Thermopylæ and later at Delphi. On p. 81 Reinach says: "In the detailed recital which Pausanius has left us of the invasion of the Galatic bands in Greece, dealing with the glorious part which the Athenians played in the defence of the Pass of Thermopylæ. But, when the defile had been forced, the Athenians departed and Pausanius makes no more mention of them in relating the defence of Delphi, where only the Phocians, four hundred Locrians and two hundred Ætolians figured. It is only after the defeat of the Gauls that the Athenians, according to Pausanius, came back, together with the Bœotians, to harass the barbarians in their retreat. . . ." On p. 83 he says: "The barbarians are incontestably the Galatians." See also by the same author, *The Gauls in Antique Art*. G. Dottin, pp. 461–462 gives us the following: "Hannibal, traversing southern Gaul, found on his passage only Gauls. On the other hand, Livy mentions the arrival of Gauls in Provence at the same time as their first descent into Italy, and Justinius places the wars of the Greeks of Marseilles against the Gauls and Ligurians before the taking of Rome by the Gauls. The invasion of the Belgæ is placed then in the third century. It is doubtless

contemporaneous with the Celtic invasion of Greece which was perhaps caused by it." See also the notes to p. 174 : 21 of this book. According to Myers, *Ancient History*, where the account of these events is briefly given on pp. 269–270, the year was 278 B. C. Breasted, 1, p. 449, gives 280 B. C.

As late as the fourth century of our era, Celtic forms of speech prevailed among the Galatians of Asia Minor. According to Jerome (Fraser's *Golden Bough*, II, p. 126, footnote), the language spoken then in Anatolia was very similar to the dialect of the Treveri, a Celtic tribe on the Moselle, of whose name Treves is the perpetuator. "It was to these people that St. Paul addressed one of his epistles."

It is interesting to note that at the present time the finest soldiers of the Turkish army are recruited in the district of Angora which includes the territory of ancient Galatia.

158 : 13. Procopius, IV, 13, says that a number of Moors and their wives took refuge in Sicily and also in Sardinia where they established colonies. The recent article by Giuffrida-Ruggeri sums up the data for Sicily, Sardinia and Corsica. See also Gibbon, *passim*, and Ripley, pp. 115–116.

158 : 16. G. Elliot Smith, 1, pp. 94 *seq.*, and the notes to pp. 127 : 26 and 128.

158 : 21. Pelasgians. Sergi, 4, followed by many anthropologists, describes as Pelasgian one branch of the Mediterranean or Eurafrican race of mankind and one group of skull types within that race. Ripley, pp. 407, 448, considers them Mediterraneans in all probability, as this is the oldest layer of population in these regions. So also do Myres, *Dawn of History*, p. 171, and most of the other authorities. In his *History of the Pelasgian Theory*, Myres sums up all that was written up to that time. Homer and other early writers make them the ancient inhabitants of Greece, who were subdued by the Hellenes. It is generally agreed that a people resembling in its prevailing skull forms the Mediterranean race of north Africa was settled in the Ægean area from a remote Neolithic antiquity. D'Arbois de Jubainville, 4, t. I, devotes a chapter or more to them, and declares on p. 110: "In fact the Pelasgians and the Hellenes are of different origin; the first are one of the races which preceded

the Indo-Europeans in Europe, the others are Indo-European."

Another recent writer who deals with this puzzling problem is Sartiaux, in his *Troie*, pp. 140–143. Finally, Sir William Ridgeway says: "The Achæans found the land occupied by a people known by the ancients as Pelasgians who continued down to classical times the main element in the population, even in the states under Achæan, and later, under Dorian rule. In some cases the Pelasgians formed a serf class, *e. g.* in Penestæ, in Thessaly, the Helots in Laconia and the Gymnesii at Argos; whilst they practically composed the whole population of Arcadia and Attica which never came under either Achæan or Dorian rule. This people had dwelt in the Ægean from the Stone Age, and though still in the Bronze Age at the Achæan conquest, had made great advances in the useful and ornamental arts. They were of short stature, with dark hair and eyes, and generally dolichocephalic. Their chief centers were at Cnossus, Crete, in Argolis, Laconia and Attica, in each being ruled by ancient lines of kings. In Argolis, Prœtus built Tiryns but later under Perseus, Mycenæ took the lead until the Achæan conquest. All the ancient dynasties traced their descent from Poseidon, who at the time of the Achæan conquest was the chief male divinity of Greece and the islands."

As to the Pelasgian being a Non-Aryan tongue, the ancient script at Crete has not yet been deciphered. Since the ancient Cretans were presumably Pelasgians, it is safe to identify them with this Non-Aryan language, although Conway, 2, pp. 141–142, is inclined to believe that it is related to the Aryan family. See also Sweet, *The History of Language*, p. 103.

158 : 22. Nordic Achæans. Ridgeway, 1, p. 683, says: "We found that a fair-haired race greater in stature than the melanochrous Ægean people had there [in Greece and the Ægean] been domiciled for long ages, and that fresh bodies of tall, fair-haired people from the shores of the northern ocean continually through the ages had kept pressing down into the southern peninsulas. From this it followed that the Achæans of Homer were one of these bodies of Celts [*i. e.*,

Nordics], who had made their way down into Greece and had become the masters of the indigenous race.

"This conclusion we further tested by an examination of the distribution of the round shield, the practise of cremation, the use of the brooch and buckle, and finally the diffusion of iron in Europe, North Africa and western Asia. Our inductions showed that all four had made their way into Greece and the Ægean from Central Europe. Accordingly as they all appeared in Greece along with the Homeric Achæans, we inferred that the latter had brought them with them from central Europe." Elsewhere, in the same book, Ridgeway identifies the Homeric age with the Achæan and Post-Mycenæan, the Mycenæan with the Pre-Achæan and Pelasgian.

Bury, *The History of Greece*, p. 44, says: "The Achæans were a people of blond complexion, of Indo-European speech. Among the later Greeks, there were two marked types, distinguished by light and dark hair. The blond complexion was rarer and more prized. This is illustrated by the fact that women and fops used sometimes to dye their hair yellow or red, the *κομης ξανθίσματα* mentioned in the Danæ of Euripedes."

159 : 4–5. Date of the siege of Troy. Hall, *Ancient History of the Near East*, p. 69, and many other authorities accept the Parian Chronicle, which makes it 1194–1184 B. C. For the whole question of the Trojan War see Félix Sartiaux, *Troie, La Guerre de Troie.*

159 : 6 *seq.* See the notes to p. 225 : 11.

159 : 10 *seq.* Bury, *History of Greece*, p. 44; DeLapouge, *Les sélections sociales.* Beddoe noted in his *Anthropological History of Europe* that almost all of Homer's heroes were blond or chestnut-haired as well as large and tall. There are many passages in the Iliad which refer to the blondness and size of the more important personages.

159 : 19 *seq.* Bury, *History of Greece*, pp. 57, 59, describes the Greek tribes which moved down before the Dorians, conquering the Achæans—the Thessalians, Bœotians, etc. But see Peake, 2, for Thessalians. Also D'Arbois de Jubainville, 4, t. II, p. 297, and Myers, *Anc. Hist.*, pp. 127, 136 *seq.*

159 : 23. Dorians. See the authorities quoted above; also Ridgeway, Von Luschan, Deniker, 2, pp. 320–321, and Hawes.

160 : 1. C. H. Hawes, p. 258 of the *Annal of the British School at Athens*, vol. XVI, "Some Dorian Descendants," says the Dorians were Alpines, and this view is shared by many others, among them Von Luschan. See also Myres, *The Dawn of History*, pp. 173 *seq.* and 213. While this may be partially true even of the bulk of the population, all the tribes to the north of the Mediterranean fringe carried a large Nordic element, which practically always assumed the leadership.

160 : 17. For the character of the Dorians, see Bury, p. 62.

161 : 20. The philosopher Xenophanes, a contemporary of both Philip and his son, in discussing man's notion of God, insists that each race represents the Great Supreme under its own shape: the Negro with a flat nose and black face, the Thracian with blue eyes and a ruddy complexion.

161 : 27. Loss of Nordic blood among the Persians. See the note to p. 254 : 11.

162 : 8. Barbarous Macedonia. Bury, *The History of Greece*, pp. 681–731.

162 : 14. Alexander the Great. Descriptions of Alexander are found in Plutarch, who quotes the memoirs of Aristoxenus, a contemporary of Alexander, regarding the agreeable odor exhaled from his skin; Plutarch also says, without giving his authority, who was probably the same, that Alexander was "fair and of a light color, passing to ruddiness in his face and upon his breast." An authority for the statement of blue and black eyes is Quintus Curtius Rufus, a Roman historian of the first century A. D., in *Historiarum Alexandri Magni, Libri Decem.* This was written three and one-half centuries after the death of Alexander. The quotation, from North's translation of Plutarch, reads: "But when Appeles painted Alexander holding lightning in his hand he did not shew his fresh color, but made him somewhat blacke and swarter than his face in deede was; for naturally he had a very fayre white colour, mingled also

with red which chiefly appeared in his face and in his brest."

In Galton's *Inquiries into the Human Faculty*, original English edition, frontispiece, is a composite photograph of Alexander the Great from six different medals selected by the curator in the British Museum. The curly hair and Greek profile are significant features. The sarcophagus of Alexander in the Constantinople Museum called the Sidonian, throws some light on this point, although there is some uncertainty among archæologists as to whether or not it is Alexander's sarcophagus.

162 : 19. See Von Luschan, *The Early Inhabitants of Western Asia*, the section on Greece.

163 : 7. *Græculus*, *-a*, *-um*. According to the Latin dictionaries, the diminutive adjective, understood mostly in a depreciating, contemptuous sense—a paltry Greek.

163 : 10. Physical types in early Greece. Ripley, pp. 407–408, quotes Nicolucci, Zaborowski, Virchow, DeLapouge and Sergi. *Cf.* Peake, 2, pp. 158–159, also Ripley, p. 411.

163 : 14. Physical types of modern Greeks. See the authorities given on p. 409 of Ripley's book, and Von Luschan, pp. 221 *seq.* Von Luschan and most other observers say that the modern Greeks, at least in Asia Minor, are a very mixed people. See his curve for head form.

163 : 16. Von Luschan, p. 239: "As in ancient Greece a great number of individuals seem to have been fair, with blue eyes, I took great care to state whether this were the case with the modern 'Greeks' in Asia. I have notes for 580 adults, males and females. In this number there were 8 with blue and 29 with gray or greenish eyes; all the rest had brown eyes. There was not one case of really light-colored hair, but in nearly all the cases of lighter eyes the hair also was less dark than with the other Greeks." See Ripley for European Greeks.

163 : 19. Albanians. Deniker, 2, pp. 333–334; Von Luschan, p. 224; Ripley, p. 410. Most Albanians are tall and dark. C. H. Hawes, *Some Dorian Descendants*, p. 258 *seq.*, says that the percentage of light eyes over light hair is nearly ten times as great, *i. e.*, there is 3 per cent of light hair to

30–38 per cent light eyes among Albanians and selected Greeks and Cretans. Also Glück, *Zur Physischen Anthropologie der Albanesen*, pp. 375–376, and the note to p. 25 : 25 of this book. Hall gives some interesting data on p. 522 of his *Ancient History of the Near East.*

163 : 26. See the note to p. 138 : 1 *seq.*

164 : 4 *seq.* Dinaric type identified with the Spartans. See C. H. Hawes, *op. cit.*, pp. 250 *seq.*, where he discusses the Spartans and the Dinaric type, and Hall, *Ancient History of the Near East*, pp. 74 and 572.

164 : 12. On p. 57 of his *History of Greece* Bury inclines to the belief that the Dorians came through Epirus, and attributes the cause of their invasion to the pressure of the Illyrians, to whom the Dorians were probably related. It is known that the Illyrians were round-headed. Finally they left the regions of the Corinthian Gulf, and sailed around the Peloponnesus to southeast Greece, where they settled, leaving only a few Dorians behind, who gave their name to the country they occupied, but ever afterward were of no consequence in Greek history. Some bands went to Crete, others on other islands and some to Asia Minor.

164 : 15. Character of the Spartans. See Bury, *History of Greece*, pp. 62, 120, 130–135.

164 : 22. See p. 153 of this book.

165 : 6 *seq.* *Cf.* the note to p. 119 : 1 and that to p. 223 : 1.

165 : 10. G. Elliot Smith, *Ancient Mariners.*

165 : 14. See the note to p. 242 : 5 on languages.

166 : 3. Gibbon, chap. XLVIII.

CHAPTER VI. THE NORDIC RACE

167 : 1 *seq.* *Cf.* Peake, 2, p. 162, and numerous other authorities. Peake's summary is brief, clear and up to date.

167 : 13 *seq.* R. G. Latham was the first to propound the theory of the European origin of the Indo-Europeans. He says that there is "a tacit assumption that as the east is the probable quarter in which either the human species or the greater part of our civilization originated, everything came from it. But surely in this there is a confusion between the

primary diffusion of mankind over the world at large and those secondary movements by which, according to even the ordinary hypothesis, the Lithuanians, etc., came from Asia into Europe."

167 : 17. See *The So-Called North European Race of Mankind*, by G. Retzius. Linnæus and DeLapouge were the first to use this term, *homo Europæus*. See Ripley, pp. 103 and 121.

168 : 13. See the notes to pp. 31 : 16 and 224 : 19.

168 : 19 *seq.* Ripley, chap. IX, p. 205, based on Arbo, Hultkranz and others. G. Retzius, in the article mentioned above, pp. 303–306, and also *Crania Suecica;* L. Wilser; K. Penka; O. Schrader, 2 and 3; Feist, 5; Mathæus Much; Hirt, 1; and Peake, 2, pp. 162–163, are other authorities. There are many more.

169 : 1 *seq.* G. Retzius, 3, p. 303. See also 1, for the racial homogeneity of Sweden.

169 : 9. Osborn, 1, pp. 457–458, and authorities given.

169 : 14. Gerard de Geer, *A Geochronology of the Last 12,000 Years.*

169 : 20 *seq.* See the note to p. 117 : 18.

170 : 3 *seq.* Cuno, *Forschungen im Gebiete der alten Völkerkunde;* Pösche, *Der Arier.*

170 : 10 *seq.* Peake, 2; Woodruff, 1, 2; and Myres, 1, p. 15. See also the notes to pp. 168 : 19 and Chap. IX of this book.

170 : 21. See the notes to pp. 213 *seq.*

170 : 29–171 : 12. See Osborn's map, 1, p. 189.

171 : 12. *Cf.* Ellsworth Huntington, *The Pulse of Asia.*

171 : 25. Peake, 2, and Montelius, *Sweden in Heathen Times*, and most of the authors already given on the subject of the Nordics.

172 : 1–25. Ripley, pp. 346–348, and pp. 352 *seq.*, together with the authorities quoted. Also Feist, 5, and Zaborowski, 1, pp. 274–278. Marco Polo, about 1298, in chap. XLVI, of his travels, says that the Russian men were extremely well favored, tall and with fair complexions. The women were also fair and of a good size, with light hair which they were accustomed to wear long.

173 : 9. See Bury, *History of Greece*, pp. 111–112, and the notes to Chap. XIV of this book.

173 : 11. Saka or Sacæ. See the notes to p. 259 : 21.

173 : 11. Cimmerians. For an interesting summary see Zaborowski, 1, pp. 137–138. For a lengthy discussion of them and of their migrations, and of their possible affiliations with the Cimbri, see Ridgeway, 1, pp. 387–397. According to the best Assyriologists the Cimmerians are the same people who, known as the Gimiri or Gimirrai, according to cuneiform inscriptions, were in Armenia in the eighth century B. C. See Hall, *Ancient History of the Near East*, p. 495. Bury, *History of Greece*, also touches on their raids in Asia Minor. Minns, p. 115, believes them to have been Scythians. G. Dottin, p. 23 and elsewhere, speaking of the Cimmerians and Cimbri, says: "The latter are without doubt Germans, therefore the Cimmerians who are the same people are not ancestors of the Celts." The Cimmerians were first spoken of by Homer (Odyssey, XI, 12–19) who describes them as living in perpetual darkness in the far North. Herodotus (IV, 11–13) in his account of Scythia, regards them as the early inhabitants of south Russia, after whom the Bosphorus Cimmerius and other places were named, and who were driven by the Scyths along the Caucasus into Asia Minor, where they maintained themselves for a century. The Cimmerii are often mentioned in connection with the Thracian Treres who made their raids across the Hellespont, and possibly some of them took this route, having been cut off by the Scyths as the Alani were by the Huns. Certain it is that in the middle of the seventh century B. C., Asia Minor was ravaged by northern nomads (Herodotus, IV, 12), one body of whom is called in Assyrian sources Gimirrai and is represented as coming through the Caucasus. They were Aryan-speaking, to judge by the few proper names preserved. To the north of the Euxine their main body was merged finally with the Scyths. Later writers have often confused them with the Cimbri of Jutland. There is no relation between the Cimbri and the Cymbry or Cymry, a word derived from the Welsh Combrox and used by them to denote their own people. See the note to p. 174 : 26.

173 : 14. Medes. See the notes to p. 254 : 13.

173 : 14. Achæans and Phrygians. See Peake, 2, who dates them at 2000 B. C. Bury says, pp. 5 and 44 *seq.:* "after the middle of the second millennium B. C., but there were previous and long-forgotten invasions." Consult also Ridgeway, 1, and the notes to pp. 158–161 and 225 : 11 of this book.

173 : 16. See the note to p. 157 : 10.

173 : 18. The Nordics cross the Rhine into Gaul. Rice Holmes, 2, pp. 11–12, gives the seventh century B. C. as the date when tall fair Celts first crossed the Rhine westward, "but it is unlikely that they were homogeneous. . . . Physically they resembled the tall fair Germans whom Cæsar and Tacitus describe, but they differed from them in character and customs as well as in speech." See also p. 336, at the bottom, where he remarks: "Early in the Hallstatt period a tall dolichocephalic race appeared in the Jura and the Doubs, who may have been the advanced guard of the Celts." 1000 B. C. for the appearance of the Celts on the Rhine is a very moderate estimate of the date at which these Nordics appear in western Europe, as that would be nearly four centuries after the appearance of the Achæans in Greece and fully two centuries after the appearance of Nordics who spoke Aryan in Italy. The Hallstatt culture (see p. 129) with which the invasion of these Nordics is generally associated had been in full development for four or five centuries before the date here given for the crossing of the Rhine. 700 B. C., given by many authorities, seems to the author too late by several centuries.

173 : 18 *seq.* G. Dottin, *Manuel Celtique*, pp. 453 *seq.*, says: "If the Celts originated in Gaul, it is likely that their language would have left in our nomenclature more traces than we find, and above all, that the Celtic denominations would be applied as well to mountains and water courses as to inhabited places. . . . According to D'Arbois de Jubainville, these names were Ligurian. Thus the Celts would have named only fortresses, and the names properly geographic would be due to the populations which preceded them. . . . These constituted for the most part the plebs, reduced almost

to the state of slavery, which the Celtic aristocracy of Druids and Equites dominated. . . . On the other hand, if one derives the Celts from central Europe, one explains better both the presence in central Europe of numerous place names, proving the establishment of dwellings of the Celts, and their invasions into southeastern Europe, more difficult to conceive if they had had to traverse the German forests. The migration of a people to a more fertile country is natural enough; the departure of the Celts from a fertile country like Gaul to a less fertile country like Germany would be very unlikely." And it must be remembered that Tacitus wondered why anyone should want to live in Germany, with its disagreeable climate, trackless forests and endless swamps.

Dottin adds the interesting bit of information, on p. 197, that the Gauls, mixed with the Illyrians (Alpines) were the farmers of old Gaul. The real Gauls were warriors and hunters.

173 : 22. Teutons. Rice Holmes, 2, pp. 546 *seq.*

173 : 26 *seq.* Deniker, 2, p. 321; Oman, *England Before the Norman Conquest*, pp. 13 *seq.* For Celts and Teutons consult also G. de Mortillet, *La formation de la nation française*, pp. 114 *seq.*

174 : 1. Goidels. Rice Holmes, 1, pp. 229, 409–410, and 2, pp. 319–320, says not earlier than the sixth or seventh centuries B. C., but Montelius and others give 800. G. Dottin, pp. 457–460, and D'Arbois de Jubainville, 4, t. I, pp. 342–343, contend that there is no historical record of it. The date depends upon whether the word κασσίτερος, which designates "tin" in the Iliad, is a Celtic word. See also Oman, 2, pp. 13–14, and Rhys and Jones, *The Welsh People*, pp. 1, 2.

174 : 7. Rice Holmes, 2, pp. 308 *seq.* and 325 *seq.;* Dottin, pp. 1 and 2, and his Conclusion. Also numerous other writers, especially D'Arbois de Jubainville, in various volumes of the *Revue Celtique*.

174 : 10. Nordicized Alpines. Dottin, p. 237: "Cæsar tells us that the Plebs of Gaul was in a state bordering on slavery. It did not dare by itself to do anything and was never consulted." *Cf.* note to p. 173 : 20.

174 : 11. Gauls in the Crimea. Ridgeway, *Early Age of*

Greece, p. 387, quotes Strabo (309 and 507) and the long Protogenes inscription from Olbia (*Corp. Inscr. Græc.*, II, no. 2058).

174 : 15. Migration of Nordics from Germany. It occurred about the eighth century B. C., according to many authors, among them G. Dottin, pp. 241, 457–458. "Cæsar, Livy, Justinius, summing up Pompeius Trogus, Appian and Plutarch, without doubt following a common source, even think that excess population is the cause of the Gallic migrations. It is one of the reasons to which Cæsar attributes the emigration of the Helvetii. Cisalpine Gaul nourished an immense population."

174 : 21. Cymry move westward. See Rice Holmes, 2, pp. 319–321; Oman, 2, pp. 13 *seq.* and especially p. 16; Deniker, 2, pp. 320–322; Dottin, pp. 460 *seq.* Both Rhys and Jones, in the *Welsh People*, and G. Dottin, suggest that this movement was only part of one great migration which dispersed the Nordics from a central home. Their appearance in Greece as Galatians at about the same time may be ascribed to this migration. See the notes to p. 158 : 1 *seq.*

Oman and many other authorities think the movement occurred some time before 325 B. C.

174 : 21 *seq.* Cymry and Belgæ. The Cymry or Belgæ were "P Celtic" in speech. They first appeared in history about 300 B. C., equipped with a culture of the second iron period called La Tène. The classic authors were apparently uncertain as to whether or not they were Germans (or Teutons), but they appear to have been largely composed of this element, and to have arrived previously from Scandinavia and to have adopted the Celtic tongue. These Belgæ drove out the earlier "Q Celts" or Goidels, and the pressure they exerted caused many of the later migrations of the Goidels or Gauls.

The groups of tribes which in Cæsar's time occupied the part of France to the north and east of the Seine were known as Belgæ, while the same people who had crossed to the north of the channel were called Brythons. To avoid designating these groups separately the author has called all these tribes Cymry, although the term can properly be applied only to the "*P* Celts" of Wales, who adopted this designation for themselves about the sixth century A. D., according to Rhys and Jones, p. 26, where we read: "The singular is Cymro, the plural Cymry. The word Cymro, is derived from the earlier Cumbrox or Combrox, which is parallel to the Gaulish Allobrox (plural Allobroges) a name applied by the Gauls to certain Ligurians whose country they conquered. . . . As the word is to be traced to Cumbra-land (Cumberland), its use must have extended to the Brythons" (see Rice Holmes, 2, p. 15, where he says the Brythons spread the La Tène culture). "But as the name Cymry seems to have been unknown, not only in Brittany, but also in Cornwall, it may be conjectured that it cannot have acquired anything like national significance for any length of time before the battle of Deorham in the year 577, when the West Saxons permanently severed the Celts west of the Severn from their kinsmen (of Gloucester, Somerset, etc., as now known).

"Thus it is probable that the national significance of the term Cymro may date from the sixth century and is to be regarded as the exponent of the amalgamation of the Goidelic and Brythonic populations under high pressure from without by the Saxons and Angles." Therefore it is a purely Welsh term, properly speaking. Broca, in the *Mêmoires d'anthropologie*, I, 871, p. 395, is responsible for the word as applied to the invaders of Gaul who spoke Celtic. He called them Kimris. See also his remarks in the *Bulletin de la sociêtê d'Anthropologie*, XI, 1861, pp. 308–309, and the article by L. Wilser in *L'Anthropologie*, XIV, 1903, pp. 496–497.

175 : 12 *seq.* See the notes to p. 32 : 8; also Rice Holmes, 2, p. 337; Fleure and James, pp. 118 *seq.* Taylor, 1, p. 109, says that there is a superficial resemblance between the Teutons and Celts, but a radical difference in skulls, the Teutonic being more dolichocephalic. Both are tall, large-limbed and fair. The Teuton is distinguished by a pink and white skin, the Celt is more florid and inclined to freckle. The Teuton eye is blue, that of the Celt gray, green, or grayish blue.

175 : 21 *seq.* Rice Holmes, 2, p. 326 *seq.*, gives a summary of the descriptions of various classic authors. Salomon

Reinach, 2, pp. 80 *seq.*, discusses Pausanias' detailed recital of the event. For the original see Pausanias, X, 22. *Cf.* also the note to p. 158 : 1.

176 : 15–177 : 27. The series of notes which were collected by the author on the wanderings of these Germanic tribes proved so lengthy, and the relationships of the peoples under discussion so intricate, that they grew beyond all reasonable proportions as notes, and carried the subject far afield. Hence it has seemed best to omit them in this connection and to embody them in another work.

Perhaps it will therefore be sufficient to say here that the results of the research have made it clear that all of these tribes were related by blood and by language, and came originally from Scandinavia and the neighborhood of the Baltic Sea. For some unknown reason, such as pressure of population, they began, one after another, a southward movement in the centuries immediately before the Christian Era, which brought them within the knowledge of the Mediterranean world. Their wanderings were very extensive and covered Europe from southern Russia and the Crimea to Spain, and even to Africa. Many of these tribes broke up into smaller groups under distinct names, or united with others to form large confederacies. Not only did some of them clash with each other almost to the point of extermination in their efforts to obtain lands, but in attempting to avoid the Huns came into contact with the Romans, and broke through the frontier of the Empire at various points. From the Romans they gained many of the ideas which were later incorporated by them in the various European nations which they founded. The result of their conquests was to establish a Nordic nobility and upper class in practically every country of Europe,—a condition which has remained to the present day.

177 : 12. Varangians. See the note on the Varangians, to p. 189 : 24.

177 : 18. See Jordanes, *History of the Goths.*

177 : 27. D'Arbois de Jubainville, 2, pp. 92–93; Taylor, *Words and Places*, p. 45; and G. Dottin, *Manuel Celtique*, p. 28. This word came from *Volcæ*, the name of a Celtic tribe

of the upper Rhine. Their name, to the neighboring Teutons, came to designate a foreigner. The Volcæ were separated into two branches, the Arecomici, established between the Rhone and the Garonne, and the Tectosages, in the region of the upper Garonne. The term Volcæ has become among the Germans *Walah*, then *Walch*, from which is derived *Welsch*, which designates the people of Romance language, such as the Italians and French. Among the Anglo-Saxons it has become *Wealh*, from which the derivation *Welsh*, which designates the Gauls, and nowadays their former compatriots who migrated to England and settled in Wales.

CHAPTER VII. TEUTONIC EUROPE

179 : 10. Mikklegard. "The Great City." This was the name given to Byzantium by the Goths.

180 : 2–11. Procopius, *Vandalic War;* Gibbon, chaps. XXXI–XXXVIII; Freeman, *Historical Geography of Europe.*

181 : 14. Gibbon, chaps. XXXVII and XXXVIII.

182 : 1. Eginhard, *The Life of Charlemagne.*

183 : 24. *The Political History of England*, vol. V, by H. A. L. Fisher, p. 205: "While the sovereigns of Europe were collecting tithes from their clergy for the Holy War, and papal collectors were selling indulgences to the scandal of some scrupulous minds, the empire became vacant by the death of Maximilian on January 19, 1519. For a few months diplomacy was busy with the choice of a successor. The king of France (Francis I) poured money into Germany, and was supported in his candidature by the pope; the king of England (Henry VIII) sent Pace to counteract French designs with the electors; but the issue was never really in doubt. Germany would not tolerate a French ruler; and on June 28, 1519, Charles of Spain was elected king of the Romans."

184 : 8. Depopulation. (Thirty Years' War.) *Cambridge Modern History*, vol. IV, p. 418, says that Germany was particularly afflicted. The data are unreliable, but the population of the empire was probably reduced by two-thirds, or from 16,000,000 to less than 6,000,000. Bavaria, Franconia and Swabia suffered most. W. Menzel says:

"Germany is reckoned by some to have lost one-half, by others, two-thirds, of her entire population during the Thirty Years' War. In Saxony 900,000 men had fallen within ten years; in Bohemia the number of inhabitants at the demise of Frederick II, before the last deplorable inroads made by Barier and Torstenson, had sunk to one-fourth. Augsburg, instead of 80,000 had 18,000 inhabitants. Every province, every town throughout the Empire had suffered at an equal ratio, with the exception of Tyrol. . . . The working class had almost totally disappeared. In Franconia the misery and depopulation had reached such an extent that the Franconian estates, with the assent of the ecclesiastical princes, abolished in 1650 the celibacy of the Catholic clergy and permitted each man to have two wives. . . . The nobility were compelled by necessity to enter the services of the princes, the citizens were impoverished and powerless, the peasantry had been utterly demoralized by military rule and reduced to servitude." It has been said that the city of Berlin contained but 300 citizens; the Palatinate of the Rhine but 200 farmers. In character, intelligence and in morality, the German people were set back two hundred years. There are, in addition to the authorities quoted here, numerous others who make the same observations, in fact, this depopulation is one of the outstanding results of the Thirty Years' War.

See also Anton Gindely, *History of the Thirty Years' War*, p. 398.

184 : 22 *seq.* The *British Medical Journal* for April 8, 1916; and Parsons, *Anthropological Observations on German Prisoners of War.*

185 : 6. See the note to p. 196 : 27.

CHAPTER VIII. THE EXPANSION OF THE NORDICS

188 : 5. Beddoe, 4; Ripley, chap. VI.

188 : 11. *British Medical Journal* for April 8, 1916.

188 : 15. Ripley, pp. 221 and 469, and the authorities quoted.

188 : 24–189 : 6. P. Kretschmer; and, on the history of High and Low German, see Herman Paul, *Grundriss der Germanischen Philologie; The Encyclopædia Britannica*, under German Language, gives a good summary.

189 : 7. Ripley, p. 256.

189 : 12. Villari, *The Barbarian Invasions of Italy;* Thos. Hodgkin, *Italy and Her Invaders.*

189 : 15. Brenner Pass. See Rice Holmes, *Cæsar's Conquest of Gaul*, p. 37; Ripley, p. 290; and most histories of the incursions of the barbarians into Italy.

189 : 24. Varangians. Most of the early historians of Russia and Germany and the monk Nestor, who was the earliest annalist of the Russians, agree in deriving the Varangians or Varegnes from Scandinavia. They probably were more of the same people whom we find as Varini on the continental shores of the North Sea. The names of the first founders of the Russian monarchy are Scandinavian or Northman. Their language, according to Constantine Porphyrogenitus, differed essentially from the Sclavonian. The author of the annals of St. Bertin, who first names the Russians (Rhos) in the year 939 of his annals, assigns them Sweden for their country. Luitprand calls them the same as the Normans. The Finns, Laplanders and Esthonians speak of the Swedes to the present day as Roots, Rootsi, Ruorzi, Rootslane or Rudersman, meaning rowers. See Schlozer, in his *Nestor*, p. 60; and *Malte Brun*, p. 378, as well as *Kluchevsky*, vol. I, pp. 56–76 and 92. The Varangians, according to Gibbon, formed the body-guard of the Greek Emperor at Byzantium. These were the Russian Varangians, who made their way to that city by the eastern routes. Canon Isaac Taylor, in *Words and Places*, p. 110, remarks that "for centuries the Varangian Guard upheld the tottering throne of the Byzantine emperors." This Varangian Guard was very largely reinforced by Saxons fleeing from the Norman Conquest of England. The name Varangi is undoubtedly identical with *Frank*, and is the term used in the Levant to designate Christians of the western rite, from the days of the Crusades down to the present time. *Cf.* Ferangistan—*land of the Franks*, or, as it is now interpreted, "Europe," especially

western Europe. E. B. Soane, *To Mesopotamia and Kurdistan in Disguise,* uses the phrase *á la ferangi* as describing anything imported from western Europe.

190 : 1. Deniker, 2, pp. 333–334; Ripley.

190 : 9. Deniker, the same.

190 : 13. Ripley, pp. 281–283.

190 : 15. Ripley, pp. 343 *seq.*

190 : 19. See the notes to pp. 131 : 26, 140 : 1 *seq.* and 196 : 18.

190 : 26. See p. 140 of this book.

192 : 1 *seq.* D'Arbois de Jubainville, 1, t. XIV, pp. 357–395; Feist, 5, p. 365. Col. W. R. Livermore, in correspondence, says that practically all students on the Celtiberian question agree upon the point where the Celts entered Spain, namely, that designated by de Jubainville. They passed along the Atlantic coast, across the Pyrenees, where the railroad from Paris to Madrid now crosses, about 500 B. C., between the time of Avienus, ± 525 and Herodotus, ± 443. In the time of Avienus the Ligurians had both ends of the Pyrenees from Ampurias to Bayonne, and controlled the sources of the Batis. In the time of Herodotus, the Gauls had the country up to the Curretes. See also Müllenhoff, *Deutsche Altertumskunde*, II, p. 238, and Deniker, 2, p. 321. D'Arbois de Jubainville, *op. cit.*, especially pp. 363–364, says: "The name Celtiberian was adopted at the time of Hannibal, who entered Spain, married a Celt, and thus won the assistance of the Celts in his march on Rome. . . . The name Celtiberian is the generic term for designating the Celts established in the center of Spain, but the word is sometimes taken in a less extended sense to designate only one part of this important group."

192 : 8. Sergi, 4, p. 70. See also p. 156 of this book.

192 : 14. See the note to p. 156, or Ridgeway, *The Early Age of Greece*, p. 375.

192 : 18. Ridgeway, *op. cit.*, p. 375. This may refer to the veins showing blue through the fair Nordic skin.

192 : 18. Ridgeway, *op. cit.*, p. 375. Here he says: "The Visigoths became the master race, and from them the Spanish Grandees, among whom fair hair is a common feature,

derive their *sangre azul.* After a glorious struggle against the Saracens, which served to keep alive their martial ardor and thus brace up the ancient vigor of the race, from the 16th century onward the Visigothic wave seems to have exhausted its initial energy, and the aboriginal stratum has more and more come to the surface and has thus left Spain sapless and supine."

192 : 22. Taylor, 2, pp. 308–309, says: "From the name of the same nation,—the Goths of Spain,—are derived curiously enough, two names, one implying extreme honor, the other extreme contempt. The Spanish noble, who boasts that the *sangre azul* of the Goths runs in his veins with no admixture, calls himself an *hidalgo*, that is, a son of the Goth, as his proudest title." A footnote to this reads: "The old etymology *Hijo d'algo*, son of someone, has been universally given up in favor of *hi' d'al Go*, son of the Goth. (More correctly *hi' del Go'*.) See a paper 'On Oc and Oyl' translated by Bishop Thirlwall, for the *Philological Museum*, vol. II, p. 337." Taylor goes on to say, however, that the version *hi' d' algo*, son of someone, is still given as the origin of this word in R. Barcia's *Primer Diccionaria Gêneral Ėtimologico de la Lengua Español.*

Concerning some other derivations Taylor continues: "Of Gothic blood scarcely less pure than that of the Spanish Hidalgos, are the Cagots of Southern France, a race of outcast pariahs, who in every village live apart, executing every vile or disgraceful kind of toil, and with whom the poorest peasant refuses to associate. These Cagots are the descendants of those Spanish Goths, who, on the invasion of the Moors, fled to Aquitaine, where they were protected by Charles Martel. But the reproach of Arianism clung to them, and religious bigotry branded them with the name *câ gots* or 'Gothic Dogs,' a name which still clings to them, and keeps them apart from their fellow-men."

Elsewhere we find the following: "The fierce and intolerant Arianism of the Visigothic conquerors of Spain has given us another word. The word Visigoth has become Bigot, and thus on the imperishable tablets of language the Catholics have handed down to perpetual infamy the name and nation of their persecutors."

193 : 14 *seq.* *Cf.* DeLapouge, *L'Aryen*, p. 343, where he says that the exodus of the Conquistadores was fatal to Spain.

193 : 17. Rice Holmes, 2; and the note to p. 69 of this book.

194 : 1. See the note to p. 173.

194 : 8. Ridgeway, 1, p. 372, says: "We know from Strabo and other writers that the Aquitani were distinctly Iberian." Consult also Rice Holmes, 2, p. 12, where he quotes Cæsar.

194 : 14 *seq.* Ridgeway, *op. cit.*, pp. 372 and 395; Ripley, chap. VII, pp. 137 *seq.*

194 : 19 *seq.* Rice Holmes, 2, under Belgæ, pp. 5, 12, 257, 259, 304–305, 308–309, 311, 315, 318–325; and *Ancient Britain*, p. 445. The modern composition of the French population has been investigated by Edmond Bayle and Dr. Leon MacAuliffe, who find that there is decided race mixture, with chestnut pigmentation of hair and eyes predominating. Blond traits were found to be almost confined to the north and east, while brunet characters prevail in the south. Pure black hair is exceedingly rare.

195 : 14. Vanderkindere, *Recherches sur l'Ethnologie de la Belgique*, pp. 569–574; Rice Holmes, 2, p. 323; Beddoe, 4, pp. 21 *seq.* and 72.

195 : 18. Ridgeway, 1, p. 373; Ripley, p. 127; Rice Holmes, 2; and Feist, 5, p. 14.

195 : 25 *seq.* Franks of the lower Rhine. Eginhard, in his *Life of Charlemagne*, p. 7, states the following: "There were two great divisions or tribes of the Franks, the Salians, deriving their name probably from the river Isala, the Yssel, who dwelt on the lower Rhine, and the Ripuarians, probably from *Ripa*, a bank, who dwelt about the banks of the middle Rhine. The latter were by far the most numerous, and spread over a greater extent of country; but to the Salians belongs the glory of founding the great Frankish kingdom under the royal line of the Merwings" (Merovingians).

196 : 2 *seq.* Ripley, p. 157; DeLapouge, *passim.*

196 : 7 *seq.* Oman, 2, pp. 499 *seq.;* Beddoe, 4, p. 94 and chap. VII; Fleure and James, pp. 121, 129; Taylor, 2, p. 129; Ripley, pp. 151–153, 316–317.

196 : 18 *seq.* DeLapouge, *passim;* Ripley, pp. 150–155.

197 : 3. See David Starr Jordan, *War and the Breed*, pp. 61 *seq.* This stature has somewhat recovered in recent years. It is now, in Corrèze, only 2 cm. below the average for the whole of France. See Grillière, pp. 392 *seq.* W. R. Inge, *Outspoken Essays*, pp. 41–42: "The notion that frequent war is a healthy tonic for a nation is scarcely tenable. Its dysgenic effect, by eliminating the strongest and healthiest of the population while leaving the weaklings at home to be the fathers of the next generation, is no new discovery. It has been supported by a succession of men, such as Tenon, Dufau, Foissac, DeLapouge and Richet in France; Tiedemann and Seeck in Germany; Guerrini in Italy; Kellogg and Starr Jordan in America. The case is indeed overwhelming. The lives destroyed in war are nearly all males, thus disturbing the sex equilibrium of the population. They are in the prime of life, at the age of greatest fecundity; and they are picked from a list out of which from 20 to 30 per cent have been rejected for physical unfitness. It seems to be proved that the children born in France during the Napoleonic wars were poor and undersized, 30 millimeters below the normal height."

197 : 11. DeLapouge, *passim;* Rice Holmes, 2, pp. 306 *seq.*

197 : 29–198 : 10. R. Collignon, *Anthropologie de la France*, pp. 3 *seq.;* DeLapouge, *Les Sélections sociales;* Ripley, pp. 87–89; Inge, p. 41; Jordan, *passim.*

198 : 22. Conscript Armies. Two interesting letters bearing on the racial differences composing conscript and volunteer armies in the recent World War may here be quoted.

The first, from Mr. T. Rice Holmes, relates to the English army of Kitchener in 1915. "Perhaps it may interest you to know that in 1915 when recruits belonging to Kitchener's army were training near Rochampton, I noticed that almost every man was fair,—not, of course, with the pronounced fairness of the men of the north of Scotland, who are descended from Scandinavians, but with such fairness as is to be seen in England. These men, as you know, were volunteers."

The second, from DeLapouge, concerns our American army in France. "I have been able to verify for myself your observations on the American army. The first to arrive were all volunteers, all dolicho-blonds; but the draft afterwards brought in inferior elements. At St. Nazaire, at Tours, and at Poictiers, I have been able to examine American soldiers by the tens of thousands and I have been able to formulate for myself a very definite conception of the types."

199 : 9. H. Belloc, *The Old Road;* Peake, *Memorials of Old Leicestershire*, pp. 34-41; Fleure and James, p. 127.

199 : 23. See the notes to pp. 174 : 21 and 247 : 3 of this book.

199 : 29-200 : 11. See p. 131 of this book; also Rice Holmes, 1, pp. 231-236, 434, 455-456; and 2, p. 15.

200 : 10. *Cf.* Rice Holmes, 1, pp. 446, 449 and the note on 451; also Oman, 2, p. 16.

200 : 12. Inferred from Rice Holmes, 1, p. 232; also Beddoe, 4, p. 31.

200 : 18. Oman, 2, pp. 174-175 and chap. III *seq.*, treats specially of these times. See also Beddoe, 4, pp. 36, 37 and chap. V.

200 : 24. Oman, 2, pp. 215-219.

201 : 1. Villari, vol I, or Hodgkin.

201 : 6 *seq.* Oman, 2; Ripley, pp. 154, 156; Beddoe, 4, p. 94; Fleure and James, pp. 121, 129; Taylor, 2.

201 : 11 *seq.* Beddoe, 4, chap. VII and the notes to p. 196 : 7 of this book.

201 : 18 *seq.* See pp. 63, 64.

201 : 23 *seq.* See the notes to p. 247. Decline of the Nordic type in England. Beddoe, H.; Fleure and James; Peake and Horton, *A Saxon Graveyard at East Shefford*, *Berks*, p. 103.

202 : 4. Beddoe, 4, p. 148.

202 : 13. Beddoe, 4, p. 92 and also chap. XII.

202 : 17. Ripley, under Ireland.

202 : 23 *seq.* See the notes to p. 108 : 1.

203 : 5 *seq.* The intellectual inferiority of the Irish. If there is any indication of the intellectual rating of various foreign countries to be derived from the draft examinations of our foreign-born, grouped according to place of nativity, a paper by Major Bingham of Washington, in regard to "The

Relation of Intelligence Ratings to Nativity" may be quoted. The total number of foreign-born examined, which formed the basis of this report, was 12,407, while the total number of native-born whites was 93,973. Only countries were considered which were represented by more than 100 men in the examinations. The tests were divided into those for literates and those for illiterates, so that even men not speaking English could be graded. In these examinations the Irish made a surprisingly poor showing, falling far below the English and Scotch, who stood very high, as well as below the Germans, Austrians, French-Canadians, Danes, Dutch, Belgians, Swedes and Norwegians, being about on a par with the Russians, Poles and Italians. Therefore, if these tests are any criterion of intellectual ability, the Irish are noticeably inferior.

203 : 18. See p. 123 of this book.

203 : 24. Beddoe, 4, p. 139 and chap. XIV.

204 : 1. See the note to p. 150 : 21.

204 : 5. There is an amusing discussion in Rice Holmes, 1, on the Pictish question. See pp. 409–424. Rice Holmes contends that the Picts were not pure remnants of the Pre-Celtic inhabitants, but a mixture of these with Celts. The term Picts has been very widely accepted as a designation for those Pre-Celtic inhabitants, who were certainly there. No other name has been given for them and it is in this sense that it is used here, and that Rice Holmes himself is obliged to use it on p. 456. It will be useful to the reader to peruse pp. 13–16 of Rhys and Jones, *The Welsh People.* Appendix B, of that volume (pp. 617 *seq.*), written by Sir J. Morris Jones, entitled "Pre-Aryan Syntax in Insular Celtic," shows the Anaryan survivals in Welsh and Irish to be remarkably similar to ancient Egyptian, which, with the Berber of intermediate situation, belongs to the great Hamitic family of languages and was the tongue of the primitive Mediterraneans. For Beddoe's opinion see 4, p. 36. On p. 247 he says, speaking of the Highland people: "Every here and there a decidedly Iberian physiognomy appears, which makes one think Professor Rhys right in supposing that the Picts were in part, at least, of that stock." See Hector McLean, 1,

p. 170, where he suggests that the Picts were originally the Pictones from the south bank of the Loire in Gaul.

The name Pixie, met with so frequently in Irish legends, and relating to little people similar to dwarfs, may have some connection with these shy little Mediterraneans whom the Nordics found on their arrival and who were forced back by them into inaccessible districts.

204 : 19. See the article on "Pre-Aryan Syntax in Insular Celtic," just mentioned, and Beddoe, 4, p. 46, quoting Elton, p. 167. For other Non-Aryan remnants, especially in names, see Hector McLean, 1, *passim.*

205 : 3. See Fleure and James, pp. 62, 73, 119–128, and especially pp. 125 and 151.

205 : 10. The same, pp. 38–39, 75 and elsewhere.

205 : 16. This is intimated by Rhys and Jones, in *The Welsh People*, p. 33.

205 : 20 *seq.* The same, chap. I, especially p. 35 and pp. 502 *seq.;* Fleure and James, p. 143.

206 : 3. Fleure and James, pp. 38, 75, 119, 152. These gentlemen say, on p. 38, that they believe that certain types, without any intervening social or linguistic barrier for centuries, have apparently persisted side by side in very marked fashion in certain parts of Wales.

A letter from Mr. Baring Gould confirms this: "In Wales there are two types, the dark Siluric and the light Norman. Here in the west of England we have the same two types. In this neighborhood one village is fair, the next dark and sallow. It is the same in Cornwall; in certain villages the type is dark and sallow, in others fair. There is no comparison between the capabilities moral and physical between the two types. The dark is tricky, unreliable and goes under, and the fair type predominates in trade, in business, in farming and in every department."

Beddoe, Fleure and James, and also Hector McLean remark on the various moral and mental capabilities of the different physical types.

206 : 13. Beddoe, 4, chap. VIII.

206 : 16 *seq.* Taylor, 2, p. 129; Keary, pp. 486 *seq.* On the Normans see Beddoe, chaps. VIII, IX and X.

207 : 2. Beddoe, the same.

207 : 11. Gibbon, chap. LVI; Taylor, 2, p. 133.

207 : 15. Beddoe, chap. VIII.

208 : 8. Beddoe, 4, p. 95. The breadth of skull "of the Norman aristocracy may probably have been smaller, but the ecclesiastics of Norman or French nationality, who abounded in England for centuries after the conquest and who, in many cases, rose from the subjugated Celtic [Alpine] layer of population, have left us a good many broad and round skulls. Thus the crania of three bishops of Durham . . . yield an index of 85.6, while those of eight Anglican canons dating from before the conquest yield one of 74.9. So far, however, as the actual conquest and armed occupation of England was concerned, the aristocracy and military caste, who were largely of Scandinavian type, came over in much larger proportion than the more Belgic or Celtic lower ranks, insomuch that it has been said that more of the Norman *noblesse* came over to England than were left behind."

During the Middle Ages the church was a very democratic institution, and it was only through its offices that the lower ranks succeeded in working their way up. This was partly because the older peoples possessed the Roman learning, and because the northern invaders were more addicted to martial than to priestly pursuits. The conquered people had no chance to rise in political, aristocratic or military circles, and contented themselves with the church. At the present time, in many Catholic countries, notably Ireland, the priests are derived from the lowest stratum of the population, as may be clearly recognized in their portraits.

208 : 14. Beddoe, *passim.*

208 : 20. Beddoe, 4, p. 270; G. Retzius, 3; Ripley; Fleure and James, p. 152; Alphonse de Candolle, *Histoire des sciences et des savants depuis deux siècles*, p. 576; Peake and Horton, p. 103; and the note to p. 201 : 23 of this book.

208 : 26. Beddoe, 4, p. 148.

210 : 5. *Cf.* Beddoe, p. 94.

210 : 20. Ripley, pp. 228, 283, 345.

210 : 24. Holland and Flanders. Ripley, pp. 157 and 293 *seq.*

210 : 25. Flemings and Franks. See Sir Harry Johnston, *Views and Reviews*, p. 101.

211 : 6. The authorities quoted in Ripley, p. 207. See also Fleure and James, p. 140; Zaborowski, 2; and C. O. Arbo, *Yner*, p. 25.

211 : 26. Ripley, pp. 363–365; Feist, 5; and Dr. Westerlund as quoted in "The Finns," by Van Cleef.

212 : 1. Ripley, p. 341.

212 : 4. See the note to p. 242 : 16.

CHAPTER IX. THE NORDIC FATHERLAND

213 : 1–23. *Cf.* O. Schrader, 2 and 3; Mathæus Much; Hirt, 1, 2; Zaborowski, 1, pp. 109–110; Peake, 2, pp. 163–167; Feist, 1, p. 14; Taylor, 1; Ripley, p. 127; Ridgeway, 1, p. 373 and the notes to pp. 239 : 16 *seq.*, and 253 : 19 of this book. D'Arbois de Jubainville, 4, t. I, pp. ix and 214, gives the date when the Indo-Europeans were united as 2500 B. C. Feist, 5, believes the Nordics were still in their homeland between 2500 and 2000 B. C. This was the transition period from Stone to Bronze in north-middle and eastern Europe. Breasted, *Ancient Times*, says: "It has recently been scientifically demonstrated on the basis, chiefly, of the Amarna tablets and other cuneiform evidence, that the Aryans had by 2000 or 1800 B. C. begun to leave a home on the east or southeast of the Caspian, where they divided into two branches, one going southeast into India, the other southwest into Babylon." "The first occurrence of Indo-European names is in the Tell-el-Amarna (Egyptian) correspondence," says Myres, *Dawn of History*, p. 153, "which gives so vivid a picture of Syrian affairs in the years immediately after 1400. They represent chieftains scattered up and down Syria and Palestine, and they include the name of Tushratta, king of the large district of Mitanni beyond Euphrates. . . . But this is a minor matter; nothing is commoner in the history of migatory peoples than to find a very small leaven of energetic intruders ruling and organizing large native populations without either learning their subjects' language or improving their own until considerably later, if at all. The

Norman princes, for example, bear Teutonic names, Robert, William, Henry; but it is Norman French in which they govern Normandy and correspond with the king of France. All these Indo-European names (mentioned in the tablets), belong to the Iranian group of languages, which is later found widely spread over the whole plateau of Persia."

214 : 1 *seq.* See pp. 158–159 of this book.

214 : 7 *seq.* Herodotus, IV, 17, 18, 33, 53, 65, 74, etc., for notes on the Scythians. Wheat was cultivated in the southern part of Scythia. Corn was an article of trade, and the loom was used. See also Zaborowski, 1; Ripley; Feist, 5.

214 : 10. Scythians. According to Zaborowski, 1, the Scythians were the earliest known Nordic nomads of Scythia, or southern Russia, from whom no doubt came the Achæans, Cimmerians, etc., and later the Persian conquerors, the leaders of the Kassites and Mitanni, etc. The Sacæ were an eastern branch of the Scythians (and likewise the Massagetæ), who threw off branches into India. Possibly the Wu-Suns and the Epthalites, or White Huns, were eastern offshoots. Owing to the fact that Scythia has been swept time and again by various hordes moving east and west, and has served no doubt as a meeting-ground for Alpines, Nordics and Mongols, these may all, at some period or another, have been called Scythians because they inhabited this little-known territory. But the indications are strongly in favor of the original Scythians being Nordics. It is in this sense that the name is here applied. Minns, *Scythians and Greeks*, and D'Arbois de Jubainville, 4, t. I, are two other authorities who have discussed the Scythians at length.

214 : 11. Cimmerians. See the note to p. 173. On the Persians, see the notes to p. 254. For the Sacæ, the note to p. 259 : 21; for the Massagetæ, the same; for the Kassites, that to p. 239 : 13. These last are Non-Aryan, according to some authors, including Prince, but Hall, *The Ancient History of the Near East*, says they are undeniably Aryans. For the Mitanni see the note to p. 239 : 16.

214 : 26–215 : 3. See p. 161 of this book.

215 : 15. See p. 160 of this book.

215 : 25. Dante Alighieri. It is interesting to know that

the name Aligheri is Gothic, a corruption of Aldiger. It belongs to such German names as those which include the word "*ger*," spear, as in Gerhard, Gertrude, etc. This name came into the family through Dante's grandmother on the father's side, a Goth from Ferrara, whose name was Aldigero. With regard to the origin of his grandfather and mother, the attempt to connect him with Roman families is known to be a pure fiction on the part of the Italian biographers, who thought it more glorious to be a Roman than anything else; but his descent from pure Germanic parentage is practically proved, since the grandfather was a warrior, knighted by the emperor Conrad, and Dante himself declares that he belonged to the petty nobility. Even to the beginning of the fifteenth century many Italians are described in old documents as Alemanni, Langobardi, etc., *ex alamanorum genere, legibus vivens Langobardorum*, etc. Though the majority of them had adopted Roman law, whereby the documentary evidence of their descent usually disappeared, they were thoroughly Germanic in blood, especially those to whom Rome owes much. See Franz Xaver Kraus, *Dante*, pp. 21–25, and Savigny, *Geschichte des römischen Rechte im Mittelalter*, I, chap. III.

216 : 1. See the notes to p. 254 : 13–15.

216 : 4. Nordic Sacæ. See the notes to p. 259 : 21.

216 : 9. See the notes to pp. 70 and 242 : 5.

216 : 12. Gibbon, especially vols. III and IV, which contain numerous references, and the note to p. 135 : 25.

216 : 17. Tenney Frank, *Race Mixture in the Roman Empire*, pp. 704 *seq.*

217 : 3. Plutarch's *Life of Pompey the Great*, and his *Life of Cæsar;* also Ferrero, *The Greatness and Decline of Rome*, vol. II, "Cæsar," chap. VII.

217 : 12. Decline of the Romans and the Punic Wars. Livy, I, XXI *seq.*, and Appian, *De rebus hispaniensibus*, and *De bello Annibalico.* Also Pliny, I, and Polybius, I. D'Arbois de Jubainville, 1, section entitled "Les Celtibères pendant la seconde guerre punique," pp. 44 *seq.*, says that Hannibal's success in Rome was due to the aid of the Celts and the Celtiberians. Hannibal gained much of his army from

the Celts of Spain, Gaul, and Cis-Alpine Gaul, as he marched toward Rome.

217 : 16. Social and Servile Wars. Plutarch's *Lives* of Fabius Maximus and of Sylla.

217 : 26. See the note to p. 51 : 18.

218 : 16. Tenney Frank, 1 and 2; Dill, 2, book II, chaps. II and III; and 1, book II, chap. I; Myers, *Ancient History*, pp. 498–499, 523–525. Bury, in *A History of the Later Roman Empire*, vol. I, chap. III, makes slavery, oppressive taxation, the importation of barbarians and Christianity the four chief causes of the weakness and failure of the Empire.

Gibbon, vol I, at the end of chap. X, says, in speaking of the extinction of the old Roman families, that only the Calpurnian gens long survived the tyranny of the Cæsars. See the last three or four pages of the chapter. Also Frederick Adams Woods, *The Influence of Monarchs*, p. 295.

219 : 11–220 : 19. Frank, 1, p. 705.

220 : 21. See p. 216 of this book.

221 : 25. Gibbon; Lecky, *The History of European Morals;* and the note to p. 218 : 16.

CHAPTER X. THE NORDIC RACE OUTSIDE OF EUROPE

223 : 2. Hall, *Ancient History of the Near East*, pp. 380 *seq.;* Myers, *Ancient History*, p. 33, footnote. Also consult Von Luschan, *The Early Inhabitants of Western Asia*, p. 230.

223 : 5. DeLapouge, *L'Aryen*, pp. 200 *seq.*

223 : 5. Tamahu. Authorities above; Sergi, 4, pp. 59 *seq.;* Beddoe, 4, p. 14, for the question of their race.

223 : 12. Broca, 1; Collignon, 5 and 7; Sergi, 1; and Ripley, p. 279. There are numerous articles on the blond Berbers and references to their relation to the Vandals. Ripley, based on Broca, gives the essential information. Gibbon, chap. XXXIII, is an important reference.

Blond Moors. Procopius says, IV, 13, describing the fighting with the Moors in Mauretania beyond Mt. Aurasium, which is thirteen days' journey west of Carthage: "I have heard Ortaias say that beyond these nations of Moors, beyond Aurasium, which he ruled" [apparently south] "there was no habitation of men, but desert land to a great distance, and that beyond this desert there are men, not black-skinned like the Moors, but very white in body and fair-haired."

Mr. J. B. Thornhill relates that about fifteen years ago he was in Morocco (presumably near Tangier) and while there he saw several purely blond Berbers from the Riff mountains. A young girl, especially, was an almost pure Swedish blond. The coloring, however, was pale and whitish rather than pink; the eyes were blue and the hair wavy and very blond.

223 : 21. For the Philistines, Anakim and Achæans see Ridgeway, 1, pp. 618 *seq.* Sir William Ridgeway places the appearance of the Philistines as nearly synchronous with that of the Achæans, and states that their weapons and armor were similar to those of the Achæans, but different from those of the other nations of the early world. *Cf.* also Hall, *Ancient History of the Near East*, p. 72, especially footnote 1, where he says: "The Philistines were specially receptive of Hellenic culture and eager to claim relationship with the Greeks, and disassociate themselves from the Semites. Their coin types shew this, see p. 399, n." He regards them as Cretans.

223 : 22–23. Sons of Anak. Numbers, XIII, 33: "And there we saw the giants, the sons of Anak, which came of the giants; and we were in our own sight as grasshoppers and so we were in their sight." Deuteronomy, I, 28: "Whither shall we go up? Our brethren have discouraged our heart, saying, 'The people is greater and taller than we; the cities are great and walled up to heaven; and moreover we have seen the sons of the Anakim there.'"

Fairness of David. I Samuel, XVI, 11, 12: "And Samuel said unto Jesse, Are here all thy children? And he said, There remaineth the youngest, and behold, he keepeth the sheep. And Samuel said unto Jesse, Send and fetch him; for we shall not sit down till he come hither. And he sent, and brought him in. Now he was ruddy, and withal of a beautiful countenance, and goodly to look to. . . ." Chap. XVII, 41, 42: "And the Philistine came on and drew near unto David, and when the Philistine looked about, and saw David, he disdained him; for he was but a youth, and ruddy and of a fair countenance." In the Hebrew, the phrase *Of a Beautiful Countenance* means fair of eyes.

The presence of Nordics in Syria among the Amorites is indicated by the tall stature, long-headedness and fair skin with which they are depicted on the Egyptian monuments. In some instances their eyes are blue. See p. 59 of Albert T. Clay's *The Empire of the Amorites*, also Sayce, and Hall.

224 : 3. Wu-Suns and Hiung-Nu. Minns, *Scythians and Greeks*, p. 121. DeLapouge, *L'Aryen*, mentions the existence of a number of central Asiatic tribes in addition to the Wu-Suns, who were Nordic. See also J. Klaproth, *Tableaux historiques de l'Asie*. Zaborowski, *Les peuples aryens*, p. 286, says: "The Hiung-Nu hurled themselves upon the Illi, and upon another blond people the Wu-Suns, whose importance was such that the Chinese, who have made them known to us, sought their alliance against the Huns. The Chinese knew then, in Turkestan, only the Wu-Suns, the Sse, or Sacæ, and the Ta-hia (our Tadjiks)."

"The Yuë-Tchi, repulsed by the Wu-Suns in 130 B. C., hurled themselves upon Bactria" (see the notes to p. 119 : 13). "The Sacæ were then masters of it and their dispossession resulted in pressing them in part into India where they founded a kingdom and also in part into the Pro-Pamirian valleys, especially that of the Oxus. The Yuë-Tchi ruled over central Asia until 425 A. D. They were dispossessed in their turn by the Hoas, or Epthalite Huns" (White Huns).

The remainder of the chapter, pp. 287–291 is concerned with Turkestan, the Wu-Suns, Huns, Kirghizes, etc.

224 : 13. Deniker, 2, pp. 59 and 371, says the Ainus are dolichocephalic and have in addition other Nordic traits. See also Haddon, 1, pp. 8, 15–16, 49–50, Ratzel and others. The Ainus are, according to Darwin, *Descent of Man*, p. 852, the hairiest people in the world.

224 : 19. See the notes to pp. 31 : 16–32 : 4.

224 : 28. Deniker, 2, pp. 59 and 371; Haddon, 1, pp. 8, 15.

225 : 11. Phrygians. Bury, *History of Greece*, pp. 46–48, says: "But about this very time (1287 B. C.) the Hittite power was declining and northwestern Asia Minor as far as the valley of the Sangarius, was wrested from their rule by

swarms of new invaders from Europe. These were the Phrygians to whose race the Dardanians belonged and who were so closely akin to the Thracians that we may speak of the Phrygo-Thracian division of the Indo-European family." On p. 44 we read: "The dynasty from which the Homeric kings, Agamemnon and Menelaus sprang, was founded according to Greek tradition, early in the 13th century (B. C.) by Pelops, a Phrygian. Agamemnon and Menelaus represent the Achæan stock. . . . The meaning of this Phrygian relationship is not clear." But if we follow the extent of the Achæan invasions and the relation of the art and language of archaic Phrygia to archaic Greece, the difficulty seems solved. See Hall, *Ancient History of the Near East*, p. 475. The *Encyclopædia Britannica* (Phrygia) says: "According to unvarying Greek tradition the Phrygians were most closely akin to certain tribes of Macedonia and Thrace; and their near relationship to the Hellenic stock is proved by all that is known of their language and art, and is accepted by almost every modern authority. . . . The inference has been generally drawn that the Phrygians belonged to a stock widespread in the countries which lie around the Ægean Sea. There is, however, no conclusive evidence whether this stock came from the east, over Armenia, or was European in origin and crossed the Hellespont into Asia Minor; but modern opinion inclines decidedly to the latter view"; and we may add that the recently demonstrated linguistic affiliations strengthen this assumption. See also Ridgeway, 1, pp. 396 and elsewhere; Peake, 2, p. 172; Feist, 5, p. 407; Félix Sartiaux, *Troie, la guerre de Troie;* and O. Schrader, Jevons translation, p. 430.

225 : 15. Cimmerians. See the note to p. 173 : 11.

225 : 17. Gauls and Galatians. See the note to p. 158 : 1.

225 : 19. Von Luschan, p. 243, says: "All western Asia was originally inhabited by a homogeneous, melanochroic race, with extreme hypsi-brachycephaly and with a 'Hittite' nose. About 4000 B. C. began a Semitic invasion from the southeast, probably from Arabia, by people looking like modern Bedawy. 2000 years later commenced a second invasion, this time from the northwest by xanthochrous and

long-headed tribes like the modern Kurds, and perhaps connected with the historic Harri, Amorites, Tamahu and Galatians.

"The modern 'Turks,' Greeks and Jews are all three equally composed of these three elements, the Hititte, the Semitic, and the xanthochrous Nordic. Not so the Armenians and Persians. They, and still more, the Druses, Maronites, and the smaller sectarian groups of Syria and Asia Minor, represent the old Hittite element, and are little, or not at all, influenced by the somatic characters of alien invaders."

Von Luschan means by Persians, the round-headed Medic element, which has always been in the majority and which has, at the present day, practically submerged the once powerful, dominant Nordic class, which he says is still seen not rarely in some old noble families.

225 : 20. Until rather recently nothing much was known about the wild Kurdish tribes living in southeast Anatolia, and what reports there were, were frequently conflicting. There are two kinds of Kurds, dark and light. More data has gradually accumulated, however, and it seems that the true Kurds are tall, blond people, who resemble very much the inhabitants of northern Europe.

Ratzel, *History of Mankind*, says, quoting Polak: "The Kurds are, in color of skin, hair and eyes, so little different to the northern, especially the Teutonic breed, that they might easily be taken for Germans. There is nothing to contradict this racial affinity in the reputation for honor and courage, which in spite of their rapacious tendencies, the Kurds enjoy wherever it has been found possible to compel them to labor or to the trade of arms. In Persia the Shah entrusts the security of his person to Kurdish officers rather than to any others. Their loyalty to their hereditary Wali, which neither Turks nor Persians have been able to shake, is also noted with praise. The Kurd prefers to wander with his herds and in the winter lives in caves like Xenophon's Carduchi. . . . The Kurds are a highly mixed race of a type chiefly Iranian, which has been compared with the Afghan but is not homogeneous. The eastern Kurds must have received a larger infusion of Turkish blood than the western.

'Husbandmen by necessity, fighters by inclination,' says Moltke, 'the Arab is more of a thief, the Kurd more of a warrior.' They are a vigorous, violent race, running wild in tribal feuds and vendettas. . . . Their women hold a freer position than those of the Turks and Persians." The quotation is from vol. III, p. 537.

Von Luschan, *op. cit.*, p. 229, describes them thus: "[They] have long heads and generally blue eyes and fair hair. They are probably descended from the Kardouchoi and Gordyæans of old historians. They live southeast of the Armenian mountains. The western Kurds are dolichocephalic and more than half of them are fair. The eastern Kurds are little known but are apparently darker and more round-headed."

Soane, in *To Mesopotamia and Kurdistan in Disguise*, gives a very full description of them, confirming the above. There are so many tribes differing from one another, that only the briefest summary may be given. It is found on pp. 398 *seq.* "Judged as specimens of the human form, there is probably no higher standard extant that that of the Kurds. The northerner is a tall, thin man (obesity is absolutely unknown among the Kurds). The nose is long, thin and often a little hooked, the mouth small, the face oval and long. The men usually grow a long moustache, and invariably shave the beard. The eyes are piercing and fierce. Among them are many of yellow hair and bright blue eyes; and the Kurdish infant of this type, were he placed among a crowd of English children, would be indistinguishable from them, for he has a white skin. In the south the face is a little broader sometimes, and the frame heavier. Of forty men of the southern tribes taken at random, there were nine under six feet, though among some tribes the average height is five feet nine. The stride is long and slow, and the endurance of hardship great. They hold themselves as only mountain men can do, proudly and erect. . . . Many and many a man have I seen among them who might have stood for the picture of a Norseman. Yellow, flowing hair, a long drooping moustache, blue eyes, and a fair skin—one of the most convincing proofs, if physiognomy be a criterion (were their language not a further proof), that the Anglo-Saxon and

Kurd are one and the same stock." For a list of Kurdish tribes and their numbers and affiliations see Mark Sykes, vol. XXXVIII of the *Jour. of the Roy. Anth. Soc. of Great Britain and Ireland*, and Von Luschan, *op. cit.*

From all this evidence by men who have travelled among them it would appear that the Kurds are descendants of some ancient Nordic invaders who have found refuge in the mountain regions north of Mesopotamia. *Cf.* the note to p. 239 : 16.

CHAPTER XI. RACIAL APTITUDES

226 : 7. Conklin, in *Heredity and Environment*, p. 207, says: "Psychological characters appear to be inherited in the same way that anatomical and physiological traits are; indeed, all that has been said regarding the correlation of morphological and physiological characters applies also to psychological ones. No one doubts that particular instincts, aptitudes and capacities are inherited among both animals and men, nor that different races and species differ hereditarily in psychological characteristics. The general tendency of recent work on heredity is unmistakable, whether it concerns man or lower animals. The entire organism, consisting of structures and functions, body and mind, develops out of the germ, and the organization of the germ determines all the possibilities of development of the mind no less than of the body, though the actual realization of any possibility is dependent also upon environmental stimuli."

Cf. Haeckel, *The Riddle of the Universe*, *passim.*

226 : 17. Deniker, 2, pp. 76, 97–104.

227 : 1. *Cf.* their busts with other Greek statues.

227 : 15. This does not refer to the peculiar nests of round-heads alluded to by Fleure and James, and Zaborowski, but to the Alpines proper.

227 : 20. DeLapouge, *Les Sélections sociales.*

228 : 18. See Tacitus, *Germania.*

229 : 6. It may be interesting in this connection to quote Fleure and James, pp. 118–119, who, after giving illustrations of Mediterranean types, say of them: "Types 1(a) to 1(c)

contribute considerable numbers to the ministries of the various churches, possibly in part from inherent and racial leanings, but partly also because these are the people of the Moorlands. The idealism of such people usually expresses itself in music, poetry, literature and religion, rather than in architecture, painting and plastic arts generally. They rarely have a sufficiency of material resources for the latter activities. These types also contribute a number of men to the medical profession, for somewhat similar reasons, no doubt.

"The successful commercial men, who have given the Welsh their extraordinarily prominent place in British trade (shipping firms, for example), usually belong to types 2 or 4" [Nordic and Nordic-Alpine, Beaker Maker], "rather than to 1, as also do the great majority of Welsh members of Parliament, though there are exceptions of the first importance.

"The Nordic type is marked by ingenuity and enterprise in striking out new lines. Type 2(c)" [Beaker Maker] "in Wales is remarkable for governmental ability of the administrative kind as well as for independence of thought and critical power."

The following remarks are taken from Beddoe, 4, p. 142: "In opposition to the current opinion it would seem that the Welsh rise most in commerce, the Scotch coming after them and the Irish nowhere. The people of Welsh descent and name hold their own fairly in science; the Scotch do more, the Irish less. But when one looks to the attainment of military or political distinction, the case is altered. Here the Scotchmen, and especially the Highlanders bear away the palm; the Irish retrieve their position and the Welsh are little heard of."

See also p. 10 of Beddoe's *Races of Britain*, and Hector McLean in vol. IV, pp. 218 *seq.* of the *Anthropological Review* and elsewhere. The following quotation from Hall's *Ancient History of the Near East* is interesting:

"Knowing what we do of the psychological peculiarities of the different races of mankind, it is perhaps not an illegitimate speculation to wonder whence the Greeks inherited this sense of proportion in their whole mental outlook. The feeling of Hellenes for art in general was surely inherited from their forebears on the Ægean, not the Indo-European side.* The feeling for naturalistic art, for truth of representation, may have come from the Ægeans, but the equally characteristic love of the crude and bizarre was not inherited: the sense of proportion inhibited it. In fact, we may ascribe this sense to the Aryan element in the Hellenic brain, to which must also be attributed the Greek political sense, the idea of the rights of the folk and of the individual in it.† The Mediterranean possessed the artistic sense without the sense of proportion: the Aryan had little artistic sense but had the sense of proportion and justice, and with it the political sense. The result of the fusion of the two races we see in the true canon of taste and beauty in all things that had become the ideal of the Greeks,‡ and was through them to become the ideal of mankind."

229 : 22. Fleure and James, p. 146, say: "In the folk tales, it is true, the people are called fairies but colouring is mentioned only in one case—that is of a trader from the sea who is said to be fair; *i. e.*, fair hair is treated as something worthy of special mention. The fairy children (changelings) are always described in such a way as to suggest they they were dark, and that they were the children of the Upland-

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* "We have only to look around and seek, vainly, for any self-developed artistic feeling among the pure Indo-Europeans. The Kassites had none and blighted that of Babylonia for centuries: the Persians had none and merely adopted that of Assyria: the Goths and Vandals had none: the Celts and Teutons have throughout the centuries derived theirs from the Mediterranean region."

† The predominance of the Aryan element in Greek political ideas is obvious. It is not probable that the old Ægean had any more definite political ideas than had his relative the Egyptian.

‡ "In matters of political and ordinary justice between man and man they fell short of their ideal often enough, but they had the reasonable ideal: the barbarians had none. The Egyptians were an imaginative race, but their imagination was untrammelled by the sense of proportion: their only thinker with reasonable and logical ideas, Akhenaten, soon became as mad a fanatic as any unreasonable Nitrian monk or Arab Mahdi. Ordinarily speaking, Egyptian and Semitic ideals were purely religious, and so, to the Greek mind, beyond the domain of reason. The Babylonians, Assyrians, and Phœnicians cannot be said ever to have possessed any ideals of any kind."

folk of our hypothesis—*i. e.*, mostly of Mediterranean race. In the romances the princes and princesses are said to be fair, as though that were exceptional. Our friend, Mr. J. H. Shaxby, draws our attention to the probability that the word fair in 'fair' or 'fair-folk' does not refer to physical traits, but is an adulatory term such as men so generally use in describing beings about whom their superstitions gather."

230 : 5. Pope Gregory, about 578 A. D.

230 : 9. For evidence as to the blond characters of Christ and the indications of His descent, see Haeckel, *The Riddle of the Universe*, chap. XVII.

Every now and then some reference to this question is noted in the daily papers. Not long ago, in one of the large New York dailies, there appeared a short paragraph concerning the letter of Lentulus. All mention of the extremely doubtful authenticity of this letter was omitted. The *Catholic Cyclopædia*, vol. IX, discusses the matter as follows:

Publius Lentulus, A fictitious person said to have been the governor of Judea before Pontius Pilate and to have written the following letter to the Roman Senate: "Lentulus, the Governor of the Jerusalemites, to the Roman Senate and People, greetings. There has appeared in our times and there still lives, a man of great power (virtue), called Jesus Christ. The people call him prophet of truth; his disciples son of God. He raises the dead, and heals infirmities. He is a man of medium size (*statura procerus*, *mediocris et spectabilis*); he has a venerable aspect, and his beholders can both fear and love him. His hair is of the color of the ripe hazel nut, straight down to the ears, but below the ears wavy and curled, with a bluish and bright reflection flowing over his shoulders. It is parted in two on the top of the head, after the pattern of the Nazarenes. His brow is smooth and very cheerful, with a face without a wrinkle or spot, embellished by a slightly ruddy complexion. His nose and mouth are faultless. His beard is abundant, of the color of his hair, not long, but divided at the chin. His aspect is simple and mature, his eyes are changeable and bright. He is terrible in his reprimands, sweet and amiable in his admonitions, cheerful without loss of gravity. He was never known to laugh, but often to weep. His stature is straight, his hands and arms beautiful to behold. His conversation is grave, infrequent and modest. He is the most beautiful among the children of men." The letter was first printed in *The Life of Christ*, by Ludolph the Carthusian, at Cologne, 1474. According to the manuscript of Jena, a certain Giacomo Colonna found the letter in an ancient Roman document sent to Rome from Constantinople. It must be of Greek origin and have been translated into Latin during the thirteenth or fourteenth century, though it received its present form at the hands of a humanist of the fifteenth or sixteenth century.

The description agrees with the so-called Abgar picture of Our Lord. It also agrees with the portrait of Jesus Christ drawn by Nicephorus, St. John Damascene, and the Book of Painters (of Mt. Athos). Munter, (*Die Sinnbilder und Kunstvorstellungen der alten Christen*, Altona, 1825, p. 9), believes he can trace the letter down to the time of Diocletian, but this is not generally admitted. The Letter of Lentulus is certainly apocryphal; there never was a governor of Jerusalem; no procurator of Judea is known to have been called Lentulus; a Roman governor would not have addressed the Senate, but the Emperor; a Roman writer would not have employed the expressions, "prophet of truth," "sons of men," "Jesus Christ." The former two are Hebrew idioms, the third is taken from the New Testament. The letter, therefore, shows us a description of Our Lord such as Christian piety conceived him.

There is considerable literature touching on this letter, for which see the *Catholic Cyclopædia*. Although we cannot credit the letter as genuine, it is interesting, as the article indicated, in showing the popular attitude to the traits in question, and in attributing these Nordic characters to Christ, as are the occasional efforts to bring the matter up again in the journals of to-day.

CHAPTER XII. ARYA

233 : 4. Synthetic. See the note on languages, p. 242 : 5.

233 : 13. Tenney Frank, 2, pp. 1, 2, and the authorities quoted at the end of the chapter. Also Peake, 2, pp. 154–173; Freeman, *Historical Geography of Europe*, pp. 44–45.

233 : 20. See the note to p. 99 : 27.

233 : 24. Ridgeway, 1; Conway, 1; Peake, 2; and numerous other authorities.

234 : 2. The Messapians, according to Ridgeway, 1, p. 347, were the remnants of the primitive Ligurians, who once occupied central Italy but who migrated, under the pressure of the Umbrians, toward the south. There some of them survived under the name Iapyges or Messapians, in the heel of the peninsula. "The name Iapyges seems identical with that of the Iapodes, that Illyrian tribe which dwelt on the other side of the Adriatic, largely contaminated with the Celts (Nordics) who had flowed down over them. That the Umbrians had a deadly hatred of a people of the same name, who had survived in their coast area, is proved by the Iguvine Tables, where the *Iapuzkum numen* is heartily cursed along with the Etruscans and the men of Nar."

See also Giuffrida-Ruggeri.

234 : 3 *seq*. See the notes to pp. 157 : 10 and 157 : 14.

234 : 7. See the note to p. 192 : 1–4.

234 : 12. See pp. 174, 199 and 247 of this book.

234 : 13 *seq*. Non-Aryan traces in central Europe. Deniker, 2, pp. 317, 334; D'Arbois de Jubainville, 3, pp. 153 *seq*., gives Ligurian place names. See also 4, t. II. It all depends on whether one considers the Ligurians as Non-Aryan. D'Arbois de Jubainville is inclined to class them as Aryans. Burke, *History of Spain*, says, in his footnote to p. 2, that Basque place names are found all over Spain. For survivals in the British Isles see the notes to pp. 204 : 5 and 204 : 19, and for the general question, Taylor, *Words and Places*.

234 : 18. Finnic dialects. Zaborowski, 3, pp. 174–175, says there are very ancient traces of Germanic elements in the Finnic languages of the Baltic. Prior to the fourth century they had a Gothic character.

234 : 24 *seq.* Agglutinative language. See the note to p. 242 : 5. For the physical characters of the Basques, Collignon, 3, p. 13; and Ripley, pp. 190 *seq.*, who bases himself upon Collignon. On the language see Pruner-Bey, 1; Feist, 5, pp. 362–363, and Ripley, pp. 20, 183–185. There are of course other writers on the Basque language. As a result of the epoch-making study of Keltic by Professor J. Morris Jones, of the University College, Bangor, Wales, which appears as Appendix B, in Rhys and Jones, *The Welsh People*, pp. 616–641, the assertion is made that Basque is apparently allied to Berber, and that other problems hitherto unsolved may be unravelled. It has not been possible to learn if any very recent progress has been the result of this new method.

235 : 1 *seq.* Pseudo-brachycephaly of the Basques. A. C. Haddon, correspondence, says: "The Basque skull is long, but with a broadening in the temporal region, in the French Basques, which forms a spurious kind of brachycephaly."

235 : 11. See the notes above, to p. 234 : 24.

235 : 17. Liguria and the Ligurian language. Sergi, 4; Ripley, chap. X. The modern Liguria comprises virtually the coast lands of Italy around the Gulf of Genoa as far south as Pisa. For ancient Liguria, which once extended into Gaul, see Déchellette, *Manuel d'archéologie*, t. II, pp. 6–25. D'Arbois de Jubainville treats of the Ligurians at length in several of his works mentioned, but Déchellette shows his wrong reasoning, rather convincingly it seems to the author. The opinions of Jullian, as given in his *Histoire de la Gaule*, are also discussed by Déchellette. A full discussion in English, of all the authorities on ancient Liguria, the Ligurians and their language is given in Rice Holmes, *Cæsar's Conquest of Gaul*, pp. 277–287. The language is treated on pp. 281–284, and 318, and by Peet, *The Stone and Bronze Ages in Italy*, pp. 164 *seq.*; see also D'Arbois de Jubainville, 3, pp. 152 *seq.* Feist, 5, p. 369, says that the Ligurians were Mediterraneans. A number of others agree with him. The evidence points rather to their having been an early Alpine people, somewhat less brachycephalic than those who came later, and this is the opinion held by Ratzel, vol. III, p. 561. The name Ligurian in this book designates a Pre-

Nordic race of Alpine affinities, with a Pre-Aryan language.

The peculiar and discontinuous distribution of Alpine peoples with names which are variations of the term Veneti, a condition rather analogous to the scattered groups of Pelasgians as noted by various authors of antiquity, may indicate the last traces of a once widely distributed race. It is possible that the Ligurians displaced these "Veneti" in southern Europe, and later became confined to a part of Gaul and northern Italy.

235 : 23. Deniker, 2, p. 317, and the note to p. 234 : 13 of this book.

235 : 27–236 : 6. See the note to p. 234 : 17.

236 : 9. Feist, 1 and 5; G. Retzius, 2, 3; Ripley, p. 351; Nordenskiöld.

236 : 14. Livs and Livonians. Ripley, pp. 358 *seq.;* Abercromby, *The Pre- and Proto-Finns;* Peake, 2, p. 150.

236 : 17 *seq.* Ripley, pp. 365–367. Feist, 5, p. 55, says the Finnish language was once agglutinative but is now inflectional. See also another reference to it on p. 231, and our note to languages, p. 242 : 5 of this book.

236 : 26. Magyar language. The most authoritative books on Finnish, Ugrian, and Hungarian speech are those of Szinnyei. See also Feist, pp. 394 *seq.*, and Deniker, 2, pp. 349–351.

237 : 1. Ripley, p. 415, says: "Turkish is the westernmost representative of a great group of languages, best known, perhaps, as the Ural-Altaic family. This comprises all those of northern Asia, even to the Pacific Ocean, together with that of the Finns in Russian Europe. . . . According to Chantre the word Turk seems quite aptly to be derived from a native root meaning *Brigand.*" Also see pp. 404–405 and 419 in Ripley.

237 : 13. Ripley, p. 418, and Von Luschan, *op. cit.*

237 : 21. Gibbon, chap. LVII, on the "Seljukian Turks." On the Osmanli Turks see Ripley, pp. 415 *seq.* On Turks in general see Von Luschan.

237 : 25. See the notes to p. 173 : 11 and to pp. 253–261.

238 : 12. G. Elliot Smith, *Ancient Egyptians*, pp. 134 *seq.;*

Zaborowski, 1, and the table of languages in the note to p. 242 : 5. Practically any book dealing with Aryans gives this information.

238 : 24. Ripley, p. 415; Von Luschan.

239 : 1. See the notes to pp. 158 and 253.

239 : 2. Hittites and the Hittite Empire. See S. J. Garstang, *The Land of the Hittites;* L. Messerschmidt, *Die Hetiter* (*Der Alte Orient*, IV, 1); Feist, 5, pp. 406 *seq.*, and the Hittite Inscriptions, Cornell Expedition of 1911. The history of the Hittite Empire has been brought to light by the research and investigations of Professor Sayce. See his *Hittites.* There are a number of short general descriptions in practically all of the histories of ancient peoples, and in those of the Near East. See for instance, Bury, *History of Greece*, pp. 45, 64; Hall, *Ancient History of the Near East*, pp. 200, 334 *seq.;* Myres, *Dawn of History*, pp. 118 *seq.*, 152 *seq.* and 199 *seq.;* Myers, *Ancient History*, pp. 91–93; Feist, *Kultur*, pp. 406 *seq.;* Von Luschan, pp. 242–243; and Zaborowski, 1, pp. 121, 134, 138 and 160, deal more with the physical characters of the Hittites.

According to some of the most recent authorities, the Hittites were an extraordinarily powerful nation and held Syria from about 3700 B. C. to 700 B. C., when the Assyrians overcame them. They had some contact with Babylon and probably their development was influenced thereby. They seem to have been the Kheta or Khatti of the Ancient Egyptians. "About 1280 B. C.," according to Von Luschan, "when Khattusil made his peace with Rameses II, there existed a large empire, not much smaller than Germany, reaching from the Ægean Sea to Mesopotamia and from Kadesh on the Orontes to the Black Sea. We do not know at present if this Hittite Empire ever had a really homogeneous population, but we have a good many Hittite reliefs and all these, without one single exception, show us the high and short heads, or the characteristic noses of our modern brachycephalic groups, (Armenoids)."

As to their language, J. D. Prince, correspondence, says that it was not Aryan, in spite of all conjectures to the contrary. "Friedrich Delitzsch analyzed some of the only syllabized material we have of this language, and I analyzed it still further in the *Journal of the American Oriental Society*, vol. XXII, 'Hittite Material in the Cuneiform Inscriptions,' reaching the conclusion as to the Non-Aryan character of this idiom. The so-called 'Hittite Inscriptions' are in hieroglyphs and give us no clue as to the pronunciation and hence none to the character of the language." Von Luschan, p. 242, says: "Orientalists are unanimous in assuming that the Hittite language was not Semitic." A very recent communication from Fr. Cumont, in *L'Académie des inscriptions et belles lettres* for April 20, 1917, says that the tongue is proved to have been Aryan.

As to their physical characters, all are agreed that the Hittites had short, brachycephalic heads, and thick, prominent noses. Myres, p. 44, remarks that the earliest portraits, which he dates about 1285 B. C., have been thought by some to be Mongoloid, but the evidence is still scanty and inconclusive. Surely if the older likenesses were Mongoloid, they bear no resemblance to the later types. On the monuments bearded figures are frequent and the type is Armenoid. See Hall, *The Ancient History of the Near East*, p. 334, for a criticism of the Mongol theory.

239 : 10. Sumer. J. D. Prince, in his article on the Sumerians in the *Encyclopædia Britannica*, classes the Sumerian language as agglutinative. The language of Susiana is also known as Anzanite, Susian or Elamite. The Anzanite may have been a dialect of Susian. Schiel's work with de Morgan's mission shows that Elamite was agglutinative and that inflections found in derived words are due to the influence of another language. The locality of Anzan is not known exactly, but is believed to have been in the plain south or southeast of Susa. See also Zaborowski, 1, pp. 149–150, and Hall, *The Ancient History of the Near East*. Hall agrees with Prince that Sumerian is agglutinative (p. 171). He also states that Elamite was agglutinative, but not otherwise like Sumerian. See his chap. V for the relationships of Sumerians and Elamites.

For Media see the notes to p. 254 : 13.

239 : 12. Assyria and Palestine. Breasted, *Ancient*

Times, p. 173 and Fig. 112; Hall, *History of the Near East;* Myres, *Dawn of History*, pp. 114–116, 140; and other histories of the Near East.

239 : 13. Kassites. See Hall, pp. 198–200. Very little is known about the Kassites. Hall declares that there is very little doubt but that they were Indo-European; Prince, from the same information, says this could not possibly be the case. They are supposed to have been an Elamite tribe who were living in the northwestern mountains of Elam, immediately south of Holwan, when Sennacherib attacked them in 702 B. C. They attacked Babylonia in the ninth year of Samsu-iluma, the son of Khammurabi, overran it and founded a dynasty there in 1780 B. C., which lasted 576 years. They became absorbed into the Babylonian population; the kings adopted Semitic names and married into the royal family of Assyria. Like the other languages of the Non-Semitic tribes of Elam, according to Prince, that of the Kassites was agglutinative. That the Kassites had been in contact with the horse-using nomads of the northern steppes, is indicated by the fact that they first introduced the horse into Mesopotamian lands, whence its use for riding and drawing chariots spread into Egypt in 1700 B. C. See Breasted, *Ancient Times*, p. 138.

239 : 16. Mitanni. Very little is known of the Mitanni. Von Luschan, p. 230, dates them around the fourteenth century B. C. In 1380 they called themselves Harri, from Harri-ya, an old form of the word Aryan. Myres, *Dawn of History*, says: "The conquest of Syria in 1500 B. C. brought Egypt face to face with a homogeneous state called Mitanni, occupying the whole foothill country east of the Euphrates. . . . The Egyptian conquest came just in time to relieve the kingdom of Mitanni from severe pressure exerted simultaneously and probably in collusion, by its neighbors in the foothills,—Assyria on the east, and the Hittites west of the Euphrates. Egypt made friends with Mitanni and more than one marriage was arranged between the royal houses. Soon after the treaty between Egypt and Mitanni, Subiluliuma, king of the Hittites of Cappadocia, whom Egyptian scribes conveniently abbreviate as Saplel, was overlord ap-

parently of a number of outpost baronies in north Syria. Assured of their help, and watching his opportunity, he flung his whole force, about 1400 upon Mitanni. . . . This closed the career of Mitanni."

The racial affinities of Mitanni are doubtful. Prince, correspondence, says the language of Mitanni was certainly not Aryan. It has been thoroughly analyzed by Ferdinand Bork, in his *Die Mitanni Sprache*, who compares it with the Georgian or Imeretian branch of the Caucasic linguistic groups. The Mitanni are not to be confused with the Ossetes, who speak a highly archaic, real Aryan language. Mitanni, in structure, is like the polysynthetic North American groups. Feist, 1, p. 14, says the Mitanni were Nordics and inhabited the western mountains of Iran, in Zagros. In 5, p. 406, he places them on the north of the Euphrates during the fifteenth and sixteenth centuries B. C. See also Hall, p. 200, the following note and that to p. 213 : 1–23 of this book. Hall also considers them Nordics.

239 : 16 *seq.* Von Luschan, p. 230, asks: "Can it be mere accident that a few miles north of the actual frontier of modern Kurdish languages there is Boghaz-Köi, the old metropolis of the Hittite Empire, where Hugo Winckler in 1908 found tablets with two political treaties of King Subiluliuma with Mattiuaza, son of Tušrata, king of Mitanni, and in both of these treaties Aryan divinities, Mithra, Varuna, Indra and Nasatya are invoked, together with Hittite divinities, as witnesses and protectors? And in the same inscriptions, which date from about 1380 B. C., the king of Mitanni and his people are called Harri, just as nine centuries later in the Achæmenidian inscriptions Xerxes and Darius call themselves Har-ri-ya, 'Aryans of Aryan stock.' So the Kurds," concludes Von Luschan, "are the descendants of Aryan invaders and have maintained their type and their language for more than 3300 years."

See also the notes to p. 173 : 11.

239 : 29. See pp. 128 and 137 of this book.

240 : 4 *seq.* See the notes to p. 173.

240 : 15 *seq.* See the notes to p. 242 : 5.

CHAPTER XIII. ORIGIN OF THE ARYAN LANGUAGES

242 : 5. The following notes on languages were taken mostly from the *History of Language*, by Henry Sweet, and were supplemented by the writings of W. D. Whitney, and an article on "Indo-European Languages," by Peter Giles.

All languages may be roughly divided into two great groups, *isolating* and *agglutinative.*

The *isolating* languages are constructed on the principle of single, distinct words for each idea, and do not employ forms which add or drop syllables, or letters, in order to obtain variety of expression, tense, mode, person, number, etc. However, the element of intonation frequently plays a large part in multiplying the number of possible forms, and therefore of ideas, in isolating languages, by imparting to otherwise identical words different meanings through pitch, rising or falling inflection or accent.

To the isolating languages belong most of those of south-eastern Asia,—Chinese, Burmese, Siamese, Thibetan, Annamite, Cochin-Chinese, Malayan, etc. The term isolating does not necessarily imply words of one syllable, although there is a tendency in this direction since the roots are stripped of all incumbrances of a modifying nature so common in agglutinative or synthetic languages. The Chinese, Burmese, Siamese and Annamite are classed as monosyllabic, the Thibetan as half-monosyllabic, while the Malay is polysyllabic.

Because languages are isolating in structure does not mean that they necessarily all belong to one family. They merely have this structural principle in common. To establish family relationships it is necessary to investigate the sets of phonetics used, the root forms, the types of ideas expressed, the composition of the sentence and various other important points included under the psychology of habit and growth forms of speech. No one of these alone is ordinarily sufficient to prove that two languages are of one common stock, since extensive borrowing of all kinds has occurred since time immemorial.

Nevertheless, in point of fact, taking languages as they now exist, only those have been shown related which possess a common structure, or have together grown out of the more primitive radical stage, since structure proves itself a more constant and reliable evidence than vocabulary. But, on the other hand, since all structure is the result of growth, and any degree of difference of structure, as well as of difference of material, may be explained as the result of discordant growth from identical beginnings, it is equally inadmissible to claim that the diversities of languages prove them to have had different beginnings.

In isolating languages, word order is very important, but here again the peculiar character of any tongue of this type depends upon the order selected, or the relative importance of ideas (general, specific, etc.). The employment of particles makes possible a freer word order.

The *agglutinative* languages are those which combine roots or parts of words or elements into new wholes to express other related ideas than those imparted by the single forms, or else entirely new concepts. Frequently these combinations are still separable on occasion into their original elements, or, if inseparable in their secondary meanings, their original parts with their derivations are still recognizable as such. Again, the component parts are no longer independent, but form a firmly knit whole.

In some languages certain classes of elements have arisen which may be added in a perfectly formal manner to other fixed roots or elements, with or without slight phonetic modifications of either or both parts. Since this occurs in conformity with fairly fixed rules, the meanings of the resultant combinations are, according to the class of the attached elements used, fairly analogous. Thus in English many verb roots obtain the present participle by the addition of the formal element *ing*, in itself now meaningless, but once, no doubt, a separate root.

The process of agglutination may be accomplished in many different ways, any of which may be characteristic of whole groups of unrelated languages. These may be roughly divided first into mono- or oligo-synthetic and polysynthetic, The former very nearly approach the isolating languages, since usually only one element may be added at a time, but the process of addition may be accomplished in any of the ways possible to agglutination.

Agglutination includes prefixing, suffixing and infixing in all degrees of complexity and fixity. Thus languages may be spoken of as agglutinative only in a relative sense. Some are much more so than others, both in point of the number of elements which it is possible to add, and their dependence upon one another and the root, denoting a higher or lower degree of inextricability in blending.

Many languages are only loosely agglutinative and the component parts of the compounds readily resolve. In others, as in the inflecting languages, the combination is inextricable.

Thus under the head of agglutinative we have the merely agglutinative or synthetic, readily resolvable combinations, which are often hardly distinguishable from isolating languages, and the less easily divisible inflectional and incorporating types. Any or all of the three processes of infixing, prefixing and suffixing may be employed in simple agglutinative combinations.

In inflectional languages the root is attended by prefixes or suffixes which form inseparable modifiers. At times phonetic changes occur which render the complex unlike the simple joining of its component parts.

As Mr. Sweet says: "If we define inflection as 'agglutination run 'mad' we may regard incorporation as inflection run madder still, for it is the result of attempting to develop a verb into a complete sentence." In some languages, such as the incorporating, a verb is sufficiently distinct in its meaning not to require an independent pronoun. French and Spanish, though not belonging to this category, contain words with the incorporating idea, as in Spanish *hablo*, I speak, and French, *pluit*, it rains. Where polysynthesism is the prevailing character, the verb may be sufficiently comprehensive to include the objective pronoun as well as the subjective, so that it is possible to find in one word a transitive, as well as in others an intransitive, sentence. But this is only rudimentary incorporation, and borders on inflection. Some American Indian languages carry it to a very high degree, appending to or inserting into this simple complex not only nouns which may stand in apposition to the implied or actual pronouns, but particles and modifiers of every description. (See the *Handbook of American Indian Languages*, published by the Bureau of American Ethnology at Washington.) Frequently during this process various parts undergo phonetic changes in accordance with fixed laws, so that the final complex may not at all resemble a string of the original elements, but becomes a new, inseparable and fixed word containing a whole sentence of ideas. This sentence, in some languages, may carry throughout certain modifiers for all noun elements—for instance, as to whether the objects under discussion are visible or invisible. These modifiers bear definite relationships to the nouns, and the "sentence word" in each of its parts must then be conjugated as a verb in an even more complicated manner. This is agglutination par excellence, and is frequently so complex as to be utterly bewildering to the Indo-European mind, even though the Indo-European languages themselves employ agglutination to a limited degree and of certain varieties, particularly of the inflectional order.

Compared to the most complicated Indian tongues, English is in the position of Chinese to Indo-European languages in its structural simplicity, though of course in Chinese we have an added complexity in the use of pitch, etc.

There are certain types of speech which secure changes (plurals, etc.) by internal vowel modification. English itself makes use of this device, but it is the outstanding feature of Semitic tongues.

Sweet says: "There are many other minor criteria of morphological classification. The most important of these is perhaps that of the agglutinative or inflectional elements before or after the word or stem [modified]. In Turkish and in other Altaic languages, as also in Finnish, these are always post-positions, so that every word begins with the root which always has chief stress. The Bantu languages of South Africa, on the other hand, favor prefixes. . . . The

Semitic languages favor prefixes and post-positions about equally. The Aryan languages are mainly post-positional, with occasional use of prefixes, most of which, however, are of later origin."

It must not be supposed that languages fall into absolutely distinct categories because of their structure. No language to-day is purely of one type or another. There have been too many centuries of borrowing and change for that condition to now be possible for any language, nor are there any longer what might be called primitive tongues. They have all long since outgrown that state, whatever it may have been, even the Botocudo of Brazil, which is generally ranked as the most primitive.

Languages may now be classified only according to their prevailing tendencies. Thus, modern English is in part isolating, in part inflectional and in part agglutinative, as that term is generally applied. Basque is an incorporating language, far removed geographically and linguistically from any other of that character. The Indo-European family may be considered as inflectional, because that process is a prominent feature, but it is by no means the only one present, nor is it exclusively typical of that family.

There is no doubt that all languages pass through certain stages in their development, but it is not at all true that they all have eventually the same or even similar histories. There are endless possibilities of growth and decay, and this fact alone excludes any set evolutionary scheme. Nor are the isolating languages the most primitive. On the contrary, they are as complex in their way as the most agglutinative North American tongues, and as expressive, for some psychological categories.

There is little doubt that all languages have begun on an isolating principle of simple roots for single ideas, from which they have diverged in endless variety. Probably all inflectional languages had an isolating and agglutinative stage, although this is by no means proved. The Chinese seems to have undergone an agglutinative past of some sort, but to have resolved again into simple roots, with only traces of fuller forms, but with the added complexity of tone, accent, and order, to give, as Sweet puts it, "that extreme of elliptical conciseness and concentrated force of expression, which excites our admiration."

English has become analytical, for many older inflected words have now been worked over into combinations of independent words, but this is far from a complete or consistent process. Probably it will never become like the Chinese, for to do away now with its inflectional system entirely would necessitate a complete upheaval of structure which is not likely to happen in the course of normal inner development, particularly with a vast literature to assist in stabilizing present forms.

As regards polysynthesism, or amount of agglutination, the Aryan tongues are intermediate; they allow affixes, but only within certain limits.

Languages undoubtedly differ from one another in their richness and power of expression, but may not be used as a test of the intellectual capacity of those who now speak them. In fact, men of any race can learn any language, unless abnormal. To account for the great and striking difference of structure among human languages is beyond the power of the linguistic student, and will doubtless always continue so. We are not likely to be able even to demonstrate a correlation of capacities, saying that a race which has done this and that in other departments might have been expected to form such and such a language. Every tongue represents the general outcome of the capacity of a race as exerted in this particular direction, under the influence of historical circumstances which we can have no hope of tracing, but there are striking anomalies to be noted.

"The Chinese and the Egyptians have shown themselves to be among the most gifted races the earth has known; but the Chinese tongue is of unsurpassed jejuneness, and the Egyptian, in point of structure, little better, while among the wild tribes of Africa and America we find tongues of every grade up to a high one or the highest. This shows clearly enough that mental power is not measured by language structure. On the whole the value and rank of a language are determined by what its users have made it do—a poor tool in skilful hands can do vastly better work than the best tool in unskilful hands, even as the ancient

Egyptians, without steel or steam, turned out products which, both for colossal grandeur and for exquisite finish, are the despair of modern engineers and artists." In other words, we must not underestimate the important part played by habit or inertia. "The formation of habit is slow, and once formed it exercises a constraining as well as a guiding influence."

The Indo-European language is one of the most highly organized families of tongues that exist, and its greatest power lies (in modern English, etc.) in its mixed structural and material character. So to the Indo-European family belongs incontestably the first place, and for many reasons,—the historical position of the peoples speaking its dialects, who have now long been the leaders in world history, the abundance, variety and merit of its literatures ancient and modern and, most of all, the great variety and richness of its development. These have made it an illustration of the history of human speech, which is extremely valuable and the training ground of comparative philology.

W. D. Whitney gives the following linguistic groups in order of their importance from a literary standpoint:

1. Indo-European (Indo-Germanic).
2. Semitic.
3. Hamitic.
4. Monosyllabic or Southeastern Asiatic.
5. Ural-Altaic (Scythian, Turanian).
6. Dravidian or South Indian.
7. Malay-Polynesian.
8. Oceanic—
    a. Australian and Tasmanian.
    b. Papuan and Negrito, etc.
9. Caucasian—
    a. Circassian.
    b. Mitsjeghian.
    c. Lesghian, Georgian.
10. European Remnants—
    Basque.
    Etruscan?
    Lydian?

11. South African, Bantu.
12. Central African.
13. American.

The first ten groups are families. So little is or was known about the last three groups that the author of the article classed together what are now known to be vast agglomerations of families. For instance, the American languages include several hundred distinct stocks, of which fifty are found in California alone. These are all, according to our present knowledge, utterly unrelated. It is known that the central African tongues belong to a different group than the southern, and it would be advisable to consult Sir Harry Johnston's recent large work on the Bantu languages.

The subdivision of the Indo-European family into cognate languages is given here to show the great diversity of tongues that may spring from one ancestor. Not all the dialects, nor even languages, have been included, but only those best known:

I. Centum (European).
 1. Greek.

	Ancient	Modern	
2. Italic	Latin.	Portuguese.	
	Oscan.	Spanish.	
	Umbrian.	Catalan.	
	Minor dialects of ancient Italy.	Provençal.	
		French.	
		Italian	Tuscan. Calabrian.
		Friulian.	
		Ladin.	
		Romansch.	
		Rumanian.	

3. Celtic	*Q.* Celtic	Irish.
		Manx.
		Scotch Gaelic.
	P. Celtic	Ancient Gaulish.
		Welsh.
		Cornish.
		Breton or Armorican.

- Germanic or Teutonic
  - Gothic.
  - Scandinavian
    - Swedish.
    - Danish.
    - Norwegian.
    - Icelandic.
    - Old Norse.
  - West Germanic
    - English.
    - Frisian.
    - Low Frankish
      - Dutch.
      - Flemish.
    - Low German.
    - High German.
- 5. Armenian.
- [6. Tokharian?]

II. Satem. (Eastern Europe and Asia.)

- 1. Aryan or Indo-Iranian
  - Sanskrit
    - Zend.
    - Old Persian.
    - Modern Persian.
  - Hindu, and nearly all the modern languages of India [and of the Pamirs].
- 2. Balto-Slavonic
  - *a*
    - Lithuanian.
    - Lettish.
    - Old Prussian or Borussian, extinct since the 17th century.
  - *b*
    - 1. S. E. Slavic
      - Old Bulgarian.
      - Russian
        - Great Russian and White Russian.
        - Little Russian or Ruthenian.
        - Servian.
        - Slovene.
    - 2. West Slavic
      - Polish.
      - Czech or Bohemian.
      - Sorb.
- 3. Albanian.

242 : 16. *Cf* S. Feist, 2, p. 250. On the archaic character of Lithuanian, see Taylor, 1, p. 15, and the authorities he quotes. Also Schrader, Jevons translation.

242 : 20–243 : 4. Deniker, 2, p. 320, sums up Hirt's posi-

tion on this question in the footnote: "According to Hirt the home of dispersion of the primitive Aryan language would be found to the north of the Carpathians, in the Letto-Lithuanian region. From this point two linguistic streams would start flowing around the mountains to the west and east; the western stream, after spreading over Germany (Teutonic languages), left behind the Celtic languages in the upper valley of the Danube, and filtered through on the one side into Italy (Latin languages), on the other side into Illyria, Albania, and Greece (Helleno-Illyrian languages). The eastern stream formed the Slav languages in the plains traversed by the Dnieper, then spread by way of the Caucasus into Asia (Iranian languages and Sanscrit). In this way we can account, on the one hand, for the less and less marked relationship between the Aryan languages of the present day and the common primitive dialect, and on the other hand, for the diversity between the two groups of Aryan languages, western and eastern."

If this were so, Sanskrit should more closely resemble the Slavic than the western languages. As it is, the old Vedic speech, the earliest form of Sanskrit, is said to show more affiliations with Greek than with any other of the Aryan tongues (see Taylor, 1, p. 21, and authorities quoted), a fact which merely adds another proof to our hypothesis that sometime between 2000 and 1500 B. C. the Nordics filtered down the Balkan peninsula in their earliest wave and about the same time other branches found their way into north-western India. The Sanskrit alphabet is more closely related to the Phœnician than to any other. At the time of the first Nordic expansion their language was not reduced to writing. The alphabet used for early Sanskrit, was, according to Professor Bühler, probably introduced into India by traders from Mesopotamia about 800 B. C. Another authority on the relations of Greek and Sanskrit is Johannes Schmidt, *Die Verwandtschaftsverhältnisse der Indo-germanische Sprachen*, Weimar, 1872.

243 : 4. Prof. J. D. Prince, correspondence, in discussing the kinship of prehistoric Ugrian to Aryan says that, although it is a temptation to believe in it, there is insuf-

ficient data for proving it. As careful a scholar as Szinnyei, in his *Vergleichende Grammatik der Ugrischen Sprache,* is careful not to commit himself. But see Zaborowski, 3; also the notes to p. 236 : 26; and Deniker, 2, pp. 349–351.

243 : 12. Deniker, 2, p. 320 and the authorities he quotes.

243 : 20. See the notes to pp. 158 : 21 and 159.

243 : 25. See p. 158 and also the notes on languages to p. 242 : 5.

244 : 1. See p. 157 and the notes.

244 : 6. Latin derivatives. Zaborowski, 1, p. 2. See table of languages, in the note to p. 242 : 5 of this book.

244 : 12–28. Ripley, pp. 423–424; Freeman, 2, p. 217; Obédénare, p. 350; Ratzel, vol. III, p. 564; and the articles on the Balkans and Hungary in the *Geographical Review,* by Cvijic and Wallace. *Cf.* G. Poisson, *The Latin Origin of the Rumanians.*

244 : 29–245 : 3. Freeman, 1, p. 439.

245 : 3. Jordanes, *History of the Goths;* Procopius, *The History of the Wars;* Gibbon, *Decline and Fall of the Roman Empire,* chaps. I and XI; Freeman, *The Historical Geography of Europe,* pp. 70–71; also the notes to pp. 143 and 156 : 10.

245 : 12. Sarmatians. See the note to p. 143 : 21. The same for the Venethi. Under the Roman dominion Latin speech appears to have spread from the Adriatic coast eastward over the Balkans replacing the native dialects except along the shores of the Ægean and in the large cities.

246 : 9. Freeman, 1, pp. 440–441.

246 : 15. Ripley, p. 425.

246 : 24. See the note to p. 173 of this book.

246 : 27. Rhys and Jones, *The Welsh People,* pp. 12, 13.

247 : 3. See the note to p. 174; Oman, 2, pp. 13, 14; Rice Holmes, 1, pp. 409–410; 2, pp. 319–320; Rhys and Jones, pp. 1, 2.

247 : 9. Goidels. Rice Holmes, 1, pp. 227, 291 and 455–456.

247 : 16. Rice Holmes, 1, pp. 229, 456; Oman, 2, p. 16. See also p. 174 of this book.

247 : 23. Ripley, p. 127; Feist, 4, p. 14; Ridgeway, 1, p. 373; and pp. 195 and 212 of this book.

247 : 27. See the note to 247 : 3.

248 : 3. Fleure and James, pp. 146, 148; D'Arbois de Jubainville, 2, p. 88.

248 : 6. Rice Holmes, 2, pp. 319–321; Taylor, 2, pp. 138, 167–168; Beddoe, 4, p. 20.

248 : 12. Neo-Celtic. D'Arbois de Jubainville, 2, p. 88; Fleure and James, p. 143.

248 : 14. Rice Holmes, 2, p. 12.

248 : 29–249 : 4. See the notes to pp. 177–178 of this book.

249 : 16. Beddoe, 4, p. 223.

249 : 20. The same, pp. 241–242; Ripley's maps, pp. 23 and 313; but consult Beddoe, 4, p. 66, for criticisms of evidence derived from place names; Taylor, 2, p. 119.

249 : 27–250 : 1. Beddoe, 4, pp. 139, 241–242.

250 : 1 *seq.* Taylor, 2, p. 173; Palgrave, vol. I of *The English Commonwealth;* Oman, 2, pp. 158 *seq.*

250 : 6. Taylor, 2, pp. 170–171.

250 : 14. Ripley, p. 22; Taylor, 2, pp. 137–138.

250 : 20. Jordanes, XXXVI; Gibbon and others.

250 : 24. Ripley, pp. 531–533.

250 : 28 *seq.* *Cf.* Ripley, pp. 101, 151 *seq.*

251 : 7 *seq.* *Cf.* Rice Holmes, 2, pp. 309–314.

251 : 18. See the note to p. 182 of this book.

251 : 26. Since the Belgæ were the last wave of the Celts, and Cymric was the later Celtic, this deduction is inevitable, even if there were no facts, such as place names, history, etc., to prove it. See the note to p. 248 : 6.

251 : 28–252 : 2. Beddoe, 4, p. 35; Ripley, pp. 101, 152; Taylor, 2, pp. 95, 98.

252 : 5. See the note to p. 196 : 7.

CHAPTER XIV. THE ARYAN LANGUAGE IN ASIA

253 : 1. See p. 158 and note. Also Peake, 2, p. 165; Breasted, 1, p. 176; Von Luschan, pp. 241–243; Zaborowski, 1, p. 112; DeLapouge, 1, p. 252, says: "Aryans were in India about 1500 B. C."

253 : 10. See Peake, 2; also pp. 170–171 and 213 of this book.

253 : 13. See the note to p. 225 : 11.

253 : 13–15. Eduard Meyer, *Zur ältesten Geschichte der Iranier.*

253 : 16 *seq.* See the note to p. 239 : 16 *seq.*

253 : 19. Zaborowski, 1, pp. 137 and 214.

254 : 1. See pp. 173 and 225 of this book.

254 : 3 *seq.* For Sacæ see the note to p. 259 : 21. Cahun, *Histoire de l'Asie*, says on p. 35: "The Sacæ and the Ephtalites and Massagetæ were from the Kiptchak." See also Zaborowski, 1, pp. 94, 100–101, 215 *seq.*

254 : 6. Massagetæ. See the note to p. 259 : 21.

254 : 8. Ephtalites, or White Huns. Cahun, *Histoire de l'Asie*, pp. 43–55: "The Turks destroyed in the first half of the seventh century a powerful nation, the Ephtalites of Soghdiana, north of Persia. They were called Ephtalites, or White Huns or Tie-le-urn Turks." See also the notes to pp. 119 : 15 and 224 : 3 of this book, and chap. XXVI in Gibbon on the Huns in general.

Procopius, vol. I, says in speaking of the Ephtalite Huns and describing their war with the Persians about 450 A. D.: "The White Huns are of the stock of the Huns in fact as well as in name, living in the territory north of Persia, and are settlers on the land in contrast to the Nomadic Huns who live at a distance. . . . They are the only ones among the Huns who have white bodies and countenances that are not ugly and they are far more civilized than are the other Huns." The general impression gained from Procopius is that they were not true Huns. "Massagetæ" is used as another name for Huns by Procopius. He describes them as mounted bowmen. It is clear that in using this name he refers to Huns only.

254 : 13. Medes. The name Medes is variously applied by different authorities; by many the Medes are regarded as a branch of the Persians, one of two kindred tribes of Nordics. The author follows Zaborowski in applying the name to the round-skulled population which was conquered by the Persians. See Zaborowski, 1, chaps. V and VI, especially part II and p. 125. Also Herodotus in the references given for Persia. Hall, *Ancient History of the Near East*, p. 459, gives an interesting bit of their story.

254 : 15. Persians. The Persians were a branch of Nordics who invaded the territory of the round-skulled Medes, and gradually imposed their language and much of their culture on the subjugated populations. See Herodotus, book I, especially 55, 71, 72, 74, 91, 95, 101, 107, 125, 129, 135, 136; and book VI, 19, where he discusses both Medes and Persians. For modern commentary the author follows Zaborowski, 1, pp. 138–139, 153 *seq.*, chap. VI, and also pp. 212–214.

Von Luschan, pp. 233–234, describes the present-day Persians, showing that there has been a resurgence of types and that the Nordic elements have been largely absorbed by the original inhabitants. He adds, however, on p. 234, that while he never saw Persians with light hair and blue eyes, he was told that in some noble families fair types were not very rare.

254 : 19. See the note on the Medes, and Zaborowski, p. 156, on the Magi.

254 : 26. Darius. Zaborowski, 1, p. 12. Herodotus, I, 209, says: "Now Hystaspes the son of Arsames was of the race of the Achæmenidæ and his eldest son Darius was at that time twenty years old." Another name for Hystaspes was Vashtaspa, whose father was Arsames (Arsháma). He traced his descent through four ancestors to Achæmenes (Hakhámamish).

Von Luschan, p. 241, says: "Nothing is known of the Achæmenides who called themselves 'Aryans of Aryan stock' and who brought the Aryan language to Persia. About 1500 B. C. or earlier, there seems to have begun a migration of northern men to Asia Minor, Syria, Persia, Egypt and India. Indeed we can now connect even Further India with the Mitanni of central Asia Minor."

See Zaborowski in regard to the Behistun tablet, etc., although practically any writers on Persia and Mesopotamia discuss this great monument.

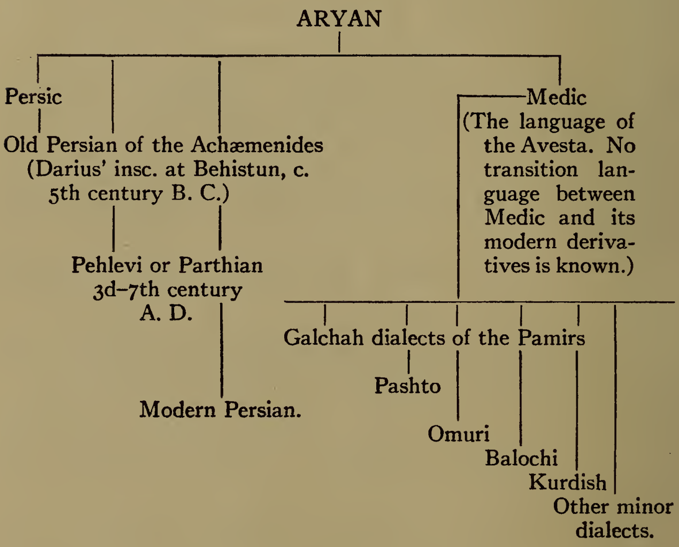
255 : 2. Zaborowski, 1, pp. 116–117.

255 : 6. See the note on the Medic language, 255 : 13. Also Zaborowski, 1, pp. 34, 182–184.

255 : 7 *seq.* Zaborowski, 1, pp. 183–184; Feist, 5, p. 423.

255 : 13. Bactria and Zendic. See the notes to pp. 119 : 15 and 257 : 12.

255 : 13. Zendic or the Medic language. See Zaborowski, 1, chap. VI. According to the Census of India, vol. I, pp. 291 *seq.*, both Persian and Medic tongues belong to the Aryan stock. They are divided in the following table:


ARYAN
Persic
Old Persian of the Achæmenides (Darius' insc. at Behistun, c. 5th century B. C.)
Pehlevi or Parthian 3d–7th century A. D.
Modern Persian.
Medic
(The language of the Avesta. No transition language between Medic and its modern derivatives is known.)
Galchah dialects of the Pamirs
Pashto
Omuri
Balochi
Kurdish
Other minor dialects.

Zaborowski, 1, p. 146, positively identifies Medic as agglutinative, in which he agrees with Oppert. See chaps. V and VI, especially part II and p. 125. For early data on the Medes see the Herodotus references given under Persia. Zaborowski says, p. 121, that Medic was spoken until 600 B. C.

255 : 15. Kurdish. Von Luschan, p. 229: "The Kurds speak an Aryan language. . . . The eastern Kurds are little known. . . . They speak a different dialect from the western tribes, but both divisions are Aryan." On the Kurds as a people, see the notes to p. 225 : 20.

255 : 20. Zaborowski, 1, p. 216–217.

255 : 23. Von Luschan, p. 234, and the note to p. 225 : 19 of this book.

255 : 26–256 : 10. See Plutarch's *Life of Alexander; Historia Alexandri Magni de prœliis;* Zaborowski, 1, p. 171.

256 : 3. Alexander the Great and the Persians. Plutarch, *Life of Alexander:* "After this he accommodated himself more than ever to the manners of the Asiatics, and at the same time persuaded them to adopt some of the Macedonian fashions, for by a mixture of both he thought a union might be promoted much better than by force, and his authority maintained when he was at a distance. For the same reason he selected 30,000 boys and gave them masters to instruct them in the Grecian literature as well as to train them to arms in the Macedonian manner. As for his marriage with Roxana, it was entirely the effect of love. . . . Nor was the match unsuitable to the situation of his affairs. The barbarians placed greater confidence in him on account of that alliance. . . . Hephæstion and Craternus were his two favorites. The former praised the Persian fashions and dressed as he did; the latter adhered to the fashions of his own country. He therefore employed Hephæstion in his transactions with the barbarians and Craternus to signify his pleasure to the Greeks and Macedonians."

256 : 11 *seq.* Armenians. Ridgeway, 1, p. 396, speaking of language, says: "That the Armenians were an offshoot of the Phrygians as mentioned in Herodotus VII, 73, is proved by the most modern linguistic results, which show that Armenian comes closer to Greek than to the Iranian tongues." *Cf.* also Hall, *Ancient History of the Near East,* p. 475. This need not imply racial affinity, however. The following notes on Armenian were contributed by Mr. Leon Dominian: "The proof of Aryan affinities in the Hittite language has not yet been established. The great difficulty in establishing the pre-Aryan relation of Armenian is due to the fact that the earliest text dates only from the fifth century A. D.

"The Cimmerians and Scythians, coming from southern Europe by way of the Caucasus (Herodotus, IV, 11, 12), reached Armenia about 720 B. C. (see Garstang, *The Land of* *the Hittites*, p. 62). The old Vannic language antedating this invasion resembles the Georgian of the Caucasus, according to Sayce (*Jour. Roy. As. Soc.*, XIV, p. 410), who has studied the local inscriptions. On p. 409 he infers that the Aryan occupation of Armenia was coeval with the victory of Aryanism in Persia at the end of the sixth century, B. C.

"The fact that Armenia is linguistically related to the western groups of the Indo-European languages and that the Persian element consists of loan words is corroborated by geographical evidence. The Armenian highland culminating in the 17000 foot altitude of Mt. Ararat has acted as a barrier dividing the plateau of Anatolia from that of Iran. Herodotus called the Armenians the 'beyond' Phrygians." See also O. Schrader, Jevons translation, p. 430.

256 : 14 *seq.* Phrygians. See the note to p. 225.

256 : 15. Félix Sartiaux, *Troie, la guerre de Troie*, pp. 5–9.

256 : 16–17. See the note to p. 239 : 2 *seq.*

256 : 21 *seq.* See the table of languages to p. 242 : 5.

256 : 27–257 : 7. See pp. 20, 134, 238–239, of this book.

257 : 12. Bactria. See the note to p. 119 : 15.

257 : 16 *seq.* See the notes to pp. 158 and 253. Also Von Luschan, p. 243; Zaborowski, 1, p. 112; and the Indian Census, 1901, vol. I, p. 294.

257 : 19. Punjab. *Panch*—five, *ab*—river, in Hindustani. *Cf.* the Greek *penta*—five.

257 : 22. Dravidians. See pp. 148–149 of this book.

257 : 23. See the note to. p. 259 : 21 and Zaborowski, 1, pp. 113 *seq.*

257 : 28–258 : 2. See the note to p. 242 : 5. George Turnour's edition in 1836, of the Mahavamsa, first made it possible to trace Sinhalese history and to prove that about the middle of the sixth century B. C. a band of Aryan-speaking people from India, under Vijaya conquered and settled Ceylon permanently. There are a number of later works on Ceylon, dealing with its archæology, flora, fauna, history, etc.

According to the British Indian Census of 1901 nearly two-thirds of the inhabitants of Assam were Hindus, and the language of Hinduism has become that of the province. The vernacular Assamese is closely related to Bengali. E. A. Gait has written a *History of Assam* (1906).

258 : 3. See the notes to pp. 158 and 253 of this book.

258 : 8. Zaborowski, 1, pp. 184–185. Compare de Morgan's dates with those of Zaborowski, the Indian Census and Meillet.

258 : 19. See Meillet, *Introduction à l'étude des langues européens*. On p. 37 he claims that the relation between the two is comparable to that prevailing between High and Low German. Zaborowski, 1, p. 184, says: "The language of the Avesta, the Zend, is a contemporary dialect of the Persian of Darius (*i. e.*, of Old Persian), from whence has come the Pehlevi and its very close relative. It even presents the closest affinities with the Sanskrit of the Vedas, from which was derived, in the time of Alexander, classical Sanskrit. This Sanskrit of the Vedas is itself so close to Old Persian that it can be said that one and the other are only two pronunciations of the same tongue." See also the Indian Census for 1901, vol. I, p. 294.

258 : 25 *seq.* Zaborowski, 1, pp. 213–216; Peake, 2, pp. 165 *seq.* and especially pp. 169 and 172.

259 : 4. Ellsworth Huntington, *The Pulse of Asia;* Peake, 2, p. 170; and Breasted, *passim.*

259 : 9. See pp. 173, 237, 253–254 and 257 of this book.

259 : 16. See the notes to pp. 119 : 13 and 255 : 7.

259 : 21. Sacæ or Saka. The Sacæ or Saka were the blond peoples who carried the Aryan language to India. Strabo, 511, allies them with the Scythians as one of their tribes. Many tribes were called Sacæ, especially by the Hindus, who used the term indiscriminately to designate any northern invaders of India.

One tribe gained the most fertile tract in Armenia which was called Sacasene, after them.

Zaborowski, 1, p. 94, relates the Sacæ with the Scythians, and says: "The Tadjiks are a people composed of suppressed elements where blonds are found in an important minority. These blonds, saving an atavistic survival of more ancient or sporadic characters I can identify. They are the Sacæ." He continues, in a note, that a great error has been committed on the subject of the Sacæ. "Repeating an assertion of Alfred Maury, whose very sound erudition enjoyed a merited reputation, I myself once repeated that the Sacæ who figures on the rock of Behistun was of the Kirghiz type. This assertion is completely erroneous. I have proved it and can say that the Sacæ and the Scythians were identical."

Zaborowski, p. 216, also identifies the Sacæ with the Persians. On this whole subject see Herodotus, VII, 64; also Feist, 5.

259 : 21. Massagetæ. Zaborowski, 1, p. 285, says: "The first information of history concerning the peoples of Turkestan refers to the Massagetæ, whose life was exactly the same as that of the Scythians (Herodotus, I, 205–216). They enjoyed a developed industrial civilization while they remained nomads. They were doubtless composed of ethnic elements different from the Scythians, but probably already spoke the Iranian tongue, like them. And since the time of Darius, at least, there were in Turkestan with them and beside them, Sacæ, whom the Greeks have always regarded as Scythians come from Europe."

Minns, *Scythians and Greeks*, p. 11, says: "The Scyths and the Massagetæ were contemporaneous and different. The Massagetæ are evidently a mixed collection of tribes without an ethnic unity; the variety of their customs and states of culture shows this and Herodotus does not seem to suggest that they are all one people. They are generally reckoned to be Iranian. . . . The picture drawn of the nomad Massagetæ seems very like that of the Scythians in a rather ruder stage of development."

Herodotus, I, 215, describes them as follows: "In their dress and mode of living the Massagetæ resemble the Scythians. They fight both on horseback and on foot, neither method is strange to them. . . . The following are some of their customs,—each man has but one wife, yet all wives are held in common; for this is a custom of the Massagetæ and not of the Scythians, as the Greeks wrongly say. Human life does not come to its natural close with this people; but when a man grows very old, all his kinsfolk collect together and offer him up in sacrifice; offering at the same time some cattle also. After the sacrifice they boil the flesh and feast on it; and those who thus end their days are reckoned the happiest. If a man dies of disease they do not eat him, but bury him in the ground, bewailing his ill fortune that he did not come to be sacrificed. They sow no grain, but live on their herds and on fish, of which there is great plenty in the Araxes. Milk is what they chiefly drink. [*Cf.* the eastern Siberian tribes of the present day.] The only god they worship is the sun, and to him they offer the horse in sacrifice, under the notion of giving to the swiftest of the gods, the swiftest of all mortal creatures."

D'Arbois de Jubainville, 4, t. I, p. 231 declares they were the same as the Scyths.

Horse sacrifices are said to prevail among the modern Parses. On the whole, the Massagetæ appear to have been largely Nordic.

259 : 24. Kirghizes. See Zaborowski, 1, pp. 216, 290–291.

259 : 25 *seq.* See the note to p. 119 : 15.

260 : 3. Gibbon, chap. LXIV. Also called the battle of Lignitz. Lignitz is the duchy, and Wahlstatt a small village on the battle-field.

260 : 8. See the notes to pp. 224 : 3 and 259 : 21.

260 : 17. Feist, 5, pp. 1, 427–431, says the Tokharian is related to the western rather than to the Iranian-Indian group of languages, and places the Tokhari in northeast Turkestan. (See the note to p. 119 : 13.) On p. 471 he identifies the Yuë-Tchi and Khang with Aryans from Chinese Turkestan, basing himself on Chinese annals, the date being given as 800 B. C. *Cf.* also the notes to p. 224 : 3 of this book.

260 : 21. See DeLapouge, 1, p. 248; Feist, 5, p. 520.

260 : 29–261 : 5. See Feist, above, in the note to 260 : 17.

261 : 6. Traces. See the note to p. 70 : 12.

261 : 17. Deniker, 2, pp. 407 *seq.;* G. Elliot Smith, *Ancient Egyptians*, p. 61; Ripley, p. 450.

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